Transferring Psycho-pedagogical Role-Play in Digital Environments: Tools and Experiences

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XXV Ciclo di Dottorato in

Scienze Psicologiche e Pedagogiche, Psicologia della Salute e Prevenzione del Rischio Individuale e Sociale

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A.A. 2012-2013

To Sofia

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Acknowledgment

This journey would not have been possible without the support of my family, professors, and friends.

I am especially grateful to my supervisor prof. Orazio Miglino for the confidence he has demonstrated by giving me the freedom to pursue research directions I am interested in. Thanks also for offering expertise and valuable insights throughout this process.

I would like to give special thanks to prof. Angelo Cangelosi who hosted and welcomed me at the University of Plymouth making this experience possible.

Thanks to the S-cube project consortium for their specific contributions to this work.

I would like to acknowledge and thank the PhD programme Director Prof. Maura Striano, as well as the PhD committee for allowing me to conduct my research in the UK and providing any assistance required.

I also wish to thank my PhD colleagues Flavia, Francesco and Silvia with whom I have shared this journey.

To my friend Joanne Clements thanks for your continue friendship, listening and offering of proofreading advice.

To all my friends and colleagues I have met during this journey thanks for any general help, for your thoughts, and being there whenever I needed a friend.

My biggest thanks go to my parents Lello and Teresa and my wonderful husband Davide whose love and support underpin all my accomplishments both past and present. Thanks to my parents for their encouragement and for keeping me away from any worry. Thanks to Davide for both emotional and scientific support, for assisting me through all the process, and offering editing advice. Special thanks also to my parents in law Marisa and Rino for their support, especially in the final period of my doctoral work.

Abstract

Since its origins, role-play technique has been adapted and applied in various ways to different settings and contexts, and for different purposes. It is used in many disciplines, such as psychology, organizational change, sociology and pedagogy. Psychodrama, sociodrama and simulation settings represent different implementations of role-play, which have been exploited in psychotherapy, education, business, organizational and training contexts. Roleplay has been extensively recognised as a powerful technique for enhancing the traditional training practice, boosting participants' learning experience, facilitating knowledge, and promoting skills and competencies in groups, as well as personal development. Thus, the term role-play describes a range of activities characterised by involving participants in "as-if" or simulated actions and circumstances (Yardley-Matwiejczuk, 1997) that project into an imaginative-creative process established through the interpretation of a real or fictional role in a specific given situation (Aronson & Carlsmith, 1968). The term role-playing was originally introduced by J.L. Moreno in 1934 after his experience and findings with the "theatre of spontaneity" (1921). Moreno discovered the therapeutic potential of the activity of dramatic improvisation, as the enactments had positive effects on the personal lives of actors involved in the representations.

Due to its intrinsic value of being a flexible method that allows participants to experience realistic learning scenarios in a way that best suits specific needs, situations and learning styles, recently there has been increased interest in roleplay developed for virtual environments. It is interesting that during the last few years, role-play technique and its principles have been represented in digital environments and thus used in relevant context of applications by different professionals according to specific needs and purposes. In literature it is possible to find various and diverse examples showing how role-play transferred in virtual environments have been used and applied. From the perspective of this work we will specifically focus on the so called Educational Multi Player On line Role Play Games (EMORPG), as they embed the methodology and the psycho-pedagogical principles originally expired by J. Moreno. More specifically we are interested in online role-play conceived and designed around the presence of a group of players interacting with each other through the presence of a digital alter-ego (an avatar) and under the supervision and guidance of a role-play director, as we have seen these as key aspects for meaningful learning experiences. Each actor (or learner) is represented by an avatar that interacts with other avatars controlled by real people in a virtual 3D scene. The director (who according to the context of role-play setting applications, can be a psychologist, teacher, trainer, educator, consultant or therapist) can play different roles. They can write a storyboard as a playwright; assign roles to players as a casting director; guide the action in the performances, as a movie director; and finally, they can give personalised feedback to the group by recording and analysing significant part of the scene of the enacted performance (feedback and debriefing phase).

This work will describe two studies. The first will examine how educational online role-play games (EMORPG) have been applied by professionals in their specific practice, as a medium for learning and change. The second will focus on the specific use of the Eutopia platform for the training of soft skills development within a specific setting of Social Enterprises.

The first chapters of this work explore principles and applications of roleplay technique in both traditional settings and digital environments. Specifically chapter 1 will be dedicated to the description of principles of Psychodrama, and Sociodrama along with their most common adaptations and applications. In particular, because role-plays have found particular application in relational contexts, typically in such areas as soft skills training, definitions of soft skills and their importance for both individual and group development will be analysed. In chapter 2 a review of online role-play examples, main features and properties of EMORPG e-learning platforms and its application in different contexts will be described. Also examples of two EMORPG represented by the E-drama and Eutopia platforms will be more specifically illustrated. Chapter 3 will specifically focus on Eutopia, as it has been applied to different contexts and is still an active platform currently hosting role-play for Social Enterprises setting (S-cube project). We will examine how Eutopia has been utilised for designing role-play scenarios built around the topics of negotiation, intercultural mediation and soft skills development, example of which have been explored within SISINE, Proactive, Eutopia MT and S-cube projects.

Chapter 4 gives voice to professionals' experience (educators, trainers, pedagogists and psychologists) whom have adopted online role-play in their professional practice, with the aim to highlight both the strengths and difficulties of using EMORPG. For this purpose an online survey has been created and distributed. Results of the questionnaire will be presented and discussed here.

Chapters 5 and 6 will be mainly focused on the newest application of the Eutopia platform in a Social Enterprise setting with the aim to promote soft skills development of different pivotal Social Enterprise actors. Chapter 5 will specifically outline the S-cube overall project rational as well as the European policy context regarding Social Enterprise backgrounds.

Chapter 6 will be dedicated to the description of findings and results from a study regarding training need analysis on Social Enterprise group targets of three different European countries involved in the project.

Introduction

Role-play technique has been variously adapted and applied to different settings, contexts, for different purposes and across many disciplines, such as psychology, organizational change, sociology and pedagogy.

Psychodrama, sociodrama and simulation settings represent different implementations of role-play, which have been exploited in psychotherapy, education, business, organizational and training contexts. Role-play has extensively been recognised as a powerful technique for enhancing the traditional training practice, boosting participants' learning experience, facilitating knowledge, and promoting skills, competencies and group, as well as personal development. Thus the term role-play describes a range of activities characterised by involving participants in "as-if" or simulated actions and circumstances (Yardley-Matwiejczuk, 1997) that project into an imaginative-creative process established through the interpretation of a real or fictional role in a specific given situation.

The term role-playing was originally introduced by J.L. Moreno in 1934 after his experience and findings with the "theatre of spontaneity" (1921). Moreno discovered the therapeutic potential of the activity of dramatic improvisation, as the enactments had positive effects on the personal lives of actors involved in the representations. Acting spontaneously does not mean being driven by uncontrolled emotions or impulsive activities. Instead it is the psychological state to respond with new and adequate actions to external circumstances without being influenced by prescriptive social roles. This according to Moreno, means to act creatively. Moreno developed and formalised these ideas into the methods of psychodrama and sociodrama. While psychodrama addresses the particularities of a single individual who is the nexus of many roles and relationships, sociodrama is oriented to the representation of a role wich is shared and relevant to group of people. Therefore, both methods operates in interpersonal field and grounds on Moreno's role theory, utilizing group dynamics, enactment, and the principal psychodramatic methodologies. Psychodrama and sociodrama will be treated in deep in the following chapter.

It is interesting that in the last years role-play technique and its principles have been also represented in digital environments and thus used in relevant context of applications by different professionals according to specific needs and purposes. In literature is possible to find various and diverse example of how role-play transferred in virtual environments have been used and applied, as will be described in the following chapter. From the perspective of this work we will specifically focus on the so called Educational Multi Player On line Role Play Games (EMORPG), as they embed the methodology and the psycho-pedagogical principles originally expired by J. Moreno. More specifically we are interested on online role-play conceived and designed around the presence of a group of player interacting to each other through the presence of digital alter-ego and under the supervision and guidance of a roleplay director, as we will see these as key aspects for meaningful learning experiences.

CHAPTER 1. Psychodrama and Sociodrama

1.1 Introduction to Psychodrama

Developed by psychiatrist Jacob Moreno, from the 1920s onwards, psychodrama is considered and recognised as the first method of group psychotherapy. In this original meaning it is a holistic, strengths-based method of psychotherapy in which people are helped to enact and explore situations from their own life - past, present and future, based on specific events in a person's life, their current or past relationships, desired roles, unresolved situations, or inner thoughts and conflicts (Chimera and Baim, 2010). Psychodrama, unlike traditional psychotherapeutic techniques, is focused on the "here and now" (hic et nunc) rather than on "there and then". In other words, psychodrama is focused on "where the action is" within a specific moment, while psychotherapy is concerned with recalling past actions, feelings, and behaviours. According to Moreno (1946, 1977) the attempt of explaining the past deprives the present moment in which the experience has its locus of all the reality that this represents for the protagonist.

Moreno believed that lack of creativity and retreat from responsibility were the central problems in modern culture, as they contribute to both personal and social psychopathology (Blatner and Blatner, 1988). Creativity is considered a crucial element of human nature to the evolution of the society. It is essential to the process of emotional growth and change that helps people to find a unique relation within the context they live, and to maturely interact with social roles and constrains, overcome traditional and prescribed modes of thoughts. These are aspects of human nature that call for spontaneity and creativity.

The psychodramatic method typically used in group settings sees members taking on the different roles needed for the drama representation. Processes of observing and participating in each other's personal stories can facilitate feelings of deep understanding and trust between group members. Expressing feelings and ideas in action is a natural tendency that allows a physical experience of embodying a role, offering a greater degree of fullness, and a stronger expression of will, as well as sense of self. As it operates in interpersonal field, when an idea is embodied so that can be witnessed by other and kinaesthetically processes in one's own being, becomes more real. It operates in order to convert behaviours intended to avoid awareness to behaviours that promote self-reflectiveness. Acting-in uses the dramatic context to generate role detachments through which actors can metaphorically step back and witness their own performances (Bromerg, 1958; Fingarette, 1967; Davies, 1976).

Psychodrama involves the staging of a real problem in life as if were a play, that's why in engages the use of terms derived by theatre: protagonist, director, audience, stage, and so on while other terms were developed specifically for psychodrama such as auxiliary ego (Moreno, 1946). The terminology of pshycodrama will be discussed in the following paragraphs.

An excerpt from the book dedicated to Moreno's contributions by Hare and Hare (1996) describes his revolutionary conception of theatre:

One day in 1911 he entered a theater with a friend when the play being presented was "Thus Spake Zarathustra", based on Nietzsche's book of that name. Moreno stopped the actor who was playing the role and objected that nobody but Zarathustra himself could play the role. The director of the play and the author came to the defense of the actor. Moreno then announced that they were witnessing the end of traditional theater and that the time was ripe for the birth of the only real theater in which every actor would play him or herself and not a role.

Moreno was deeply impressed by the therapeutic effect of dramatic play, as shown by what is known in the history of psychodrama as "the Barbara and George incident," both actors at the Maysedergasse spontaneous theatre of Moreno. Barbara usually shy and reserved in public, was very talented in reciting sweet and romantic roles. Her husband George, who also was an actor at the spontaneous theatre at Maysedergasse, confided to Moreno that Barbara was used to exhibit extremely angry and aggressive behaviours at home. Moreno responded by involving Barbara in playing role of vulgar, trivial and choleric women inviting her to express her emotions violently. Once her fits of anger and resentment became less intense, Moreno invited the couple to recite themselves on the stage. They enacted scenes portraying the true of their interactions in real life situations with all the row, destructive rage, conflicts and disaccord.

1.2 The psychodramatic method

The psychodramatic method uses mainly five instruments — the protagonist (subject or patient) the director (educator, therapist, trainer, group leader) the auxiliary (also called auxiliary egos) the audience, and the stage.

The *protagonist* is the person who is the subject of the psychodramatic enactment, portraying personal life situations whatever it is a client, patient, student, trainee, and the like.

The *director* is the person who orchestrates the psychodrama to help and support a protagonist to explore a problem or dimension. In therapy groups the director take on the role components of both director and therapist, although in other therapy settings such as hospital groups, also the individual therapist of the patient can also be present.

In training group the role of director can be more flexible, for example a person that needs to deal with the issue of being in the role of group leader, the director may be one of the group members. Later on another person serves as director and the previous leader shift in to the role of protagonist. The pshychodramatic roles (director, protagonist, audience, auxiliary) are not fixed assignment as they can shift so that a person can play many and different roles in the span of several enactments. However the role of director requires a complex of skills that go beyond the ordinary training of most group leaders.

The *auxiliary* indicates anyone beside the protagonist and the director who takes part in the psychodrama. Usually he interprets someone or something which is part of the protagonist's life or represents "another part" of the protagonist. There are different types of roles that can be performed by an auxiliary, as for example, the role of a significant other person that can be an employer, colleague, spouse, friend or therapist. When this person is the main

character in the enactment playing opposite the protagonist, he is also called antagonist.

Double refers to when the auxiliary takes the role of the protagonists' alter ego. It helps the protagonist to clarify and express inner feelings, a deeper level of emotion and preconscious ideation. In helping to express emotion the double can amplify or emphasise statements made by the protagonist. If the double stresses that the protagonist is feeling something strongly and intensely, but he is not expressing those emotions, the double may speak out and ventilate the love, the resentment or whatever is experienced or felt. There are many ways of doubling going from the dramatization of feelings, verbalisation of nonverbal communications, interpretation of feelings, contradiction of feelings, and the like.

The term *audience* refers to the others present during the psychodrama. It is the group in which the enactment occurs, and may be the psychotherapeutic group, class in school, participants at a workshop in management training. During the psychodrama the director involves the audience in the process, and as it can give feedback, can be a source of auxiliaries, and act as a Greek chorus (the group is instructed to repeat certain phrases during the enactment as technique that can deepen the protagonist's experience and self-discovery).

The *stage* is the area in which the enactment takes place. In therapeutic settings the stage provides the patient with a living space multi-dimensional and flexible. The living space of reality is often narrow and restraining. The patience on the stage may find his equilibrium again due to its methodology of *freedom*, from both *unbearable stress and freedom for experience and expression* (Moreno, 1946). The stage space is an extension of life beyond the reality tests of life itself. The stage may also be the area aside of a group or may be the actual arena of a conflict (exploration of a conflict in the context where it occurred before). As Moreno highlighted that: *the locus of a psychodrama, if necessary, may be designated everywhere, wherever the patients are, the field of battle, the classroom or the private home* (Moreno, 1946).

Every psychodrama session comprises of three stages: warm-up; enactment; sharing or closure.

The *warming up* refers to the first phase of the psychodramatic enactment. Without an effective warming up phase role-play or psychodramatic actions are likely destined to fail. It is a processes aiming to enhance spontaneity and emotional awareness. Group members are helped to be more comfortable with each other and with the task at hand, to share expectations and concerns, to find out and recognise their own place and contribution in the group process. Out of this phase one member of the group is selected to become the protagonist whose story is explored or who wishes to work on some difficulties. The warm-up phase applies to the following components regarding the group process: warm-up of director himself; building sense of group cohesion, identity and trust; development of a group theme; selection of protagonist; and moving the protagonist onto the stage.

Following the warming up phase the pshychodramatic process enters its second phase, the *enactment* involving the exploration of problems or difficulties of the protagonist. During this phase the protagonist is helped and supported toward the exploration and dramatic representation of many dimensions of his life. The action evolves and unfolds according to the following cycle:

- Address peripheral issues or superficial events first and move to more core conflicts;
- b) Portray and exploration of inner and unexpressed emotions;
- c) Explicitly portray basic internal attitude and assumptions of protagonist, others and believes of human relationships;
- d) Act hunger, experience doing things that fulfil their needs, as it drives at the core of the self;
- e) Allow catharsis of the repressed emotions if it seems natural;
- f) Explore relations of protagonist with significant others in his social network, through reversing role and changing parts;

g) Begin to develop integration of the gained insight by developing a sense of mastery over the problem, moving from the catharsis of abreaction to the catharsis of integration.

Third and last phase of psychodramatic enacting is integration. This involves mastering previously denied problems or disowned feelings and not only being aware of them. The process implies re-engaging in different ways challenges of the external world, as result of a behavioural practice undertaken during the psychodramatic enactment. During this protagonist has the opportunity to re-play and therefore practice and rehearsal skills and behaviours supported and guided by constructive feedback of the director, as well as the group members that culminates with sharing of personal feelings experienced. If referred to role training or sociodramatic role-playing the integration phase implies a better understanding of a specific situation and the flexibility of thinking of alternatives to resolve problems, and do not require that protagonist exposes particulars of personal life. Following the director moves into the closing phase using a variety of techniques, such as *re-entry* (application of what has been learnt to the everyday life situations); *unfinished* business (expression of unspoken feelings before they end and before next session); separation (elaboration of the end of the session without feeling of breaking up group cohesion, as result of a high degree of intimate and emotional exchanges).

It is interesting to point out that there are many crossovers in how the term psychodrama is used when applied for purposes beyond therapeutic settings. Most of them reflect cultural, politic and semantic issues related to the words composing the term itself. For example in some settings the term role-playing is much preferred, as the prefix psycho seems to be too strictly associated to psychoanalysis or to suggest aspects related to something that urge for being fixed. Similarly the suffix drama often carries out ideas of histrionic, phony and sometimes manipulative expressions of emotions and behaviours. On the other hand psychodrama is not a representation of a dramatic novel or theatrical piece infused with psychological nuances. The essential element of the psychodramatic approach refers to a context in which the participants are enabled to suspend their habitual reactive patterns and reconsider how else they might choose to respond. It is a method that aimed at creativity, healing and wisdom, not a blind playing out of some tragic patterns of self-deception (Blatner, 2006).

Role-playing has been used as synonym of psychodrama by many authors in the field, as for example Kipper (1986) and Corsini (1966). The last argues that when used in psychotherapy pshychodrama correspond to the educational connotation of role-playing for which people act out imaginary situations for purposes directed to self-understanding, improvement of skill, analysis of behaviour or to demonstrate how one operates or should operates (Corsini, 1966).

In other settings the term role-playing avoids any exploration of participants' personalities and focusses, for example, on a better and deeper understanding of a specific role related to a specific context. This is the connotation recalling the idea of sociodrama that will be discussed following. For others the term role-playing blends into task-behaviour oriented simulations, focussing on the rehearsal of behaviours or strategies within a protected environment, such as flight training, military exercises, situation tests, and so on.

1.3 Sociodrama

Moreno (1961) believed that every role is expression of a fusion of private and collective components (more details on role theory will be given in the following paragraph). The first refer to the aspects that are specific to the individual, while the collective elements are those roles that people share in common. For instance, with regards to the enactment of the role of a mother, although everyone can represent aspects related to the care of a child (feedings, cleaning, cuddling) each individual has a unique style of performing these functions, that represent the individual aspects of the collective role of mother (Garcia and Sternberg, 1989).

As Moreno clarifies, the main difference between the psychodramatic and the sociodramatic methods reside in the types of role that are explored. While psychodrama deals with problems and dilemmas of an individual in psychotherapy, sociodrama works in mainly nonclinical contexts to clarify the issues involved in intergroup conflicts (Moreno, 1977). In order to resolve conflicts between collective roles, Moreno developed Sociodrama. It is a method for exploring a problem that involves a role or role-relationship, a theme that can be significant for a group of people. Some example are described following: people with different ethnic and racial background attempting to resolve their differences; politician, lawyers, biologist and other representative of the community dealing with ethical problems in medical health; teenagers exploring different expectations and attitudes about gender differences and so on.

In other words while psychodrama is protagonist centred, in contrast sociodrama can be described as group-centred, because although a person can participate as protagonist in a sociodrama, the enactment will reflect the role that the protagonist shares with the group, while other particulars of individuals are not explored or considered. Psychodrama deals with individual problems and involves the role-playing of personal aspect of individuals' life, as result of the concourse/concurrence of many different roles. Diversely sociodrama focuses on the exploration of conflict interactions at the level of social-common roles. For example if the action aims to explore parents' roles we refer to a social role, conversely if the focus is on how a specific parent is experienced, conceptualized and performed by a single individual, we refer to a psychodramatic role.

Therefore while in psychodrama the enactment process is focused on individuals taking on the role of protagonists, in sociodrama the protagonist of the session becomes the group itself.

They are both grounded on Moreno's role theory and utilize group dynamics, enactment, and principal psychodramatic methodologies. In fact they employ common psychodramatic tools considered as invaluable experiential resources for cultivating empathy, effective feedback culture, selfdisclosure, self-awareness and mental flexibility, such as "double", "role reversal", "mirror" and their combinations. One of the most important principle of conducting sociodrama is that the director should not turn it into psychodrama, but stick its focus to the topics, in order to benefit from the deep exploration of the issues related to that role in that specific situation or context.

If for example a group of nurses in training is asked to explore and understand more about their feelings regarding patients affected by AIDS, the director should empathise the emotional issues and facets that would be likely common to the nurse-patience relationship and not to the specific nurse who is portraying the role of protagonist (Sternberg and Garcia, 1989).

1.4 Role theory

Moreno (1946) defines role as the functioning form that individuals assume in the specific moment they respond to specific situations in which other persons or objects are involved, and highlights as roles do not emerge from the self, but the self emerges from the roles.

Role-play as a derivative of an art form, invites the expression of novel or original ideas (Blatner, 1995). The dynamic relationships between the individual and others are expressed through roles. In terms of role theory each individual can be imagined as constituted by multiple roles reciprocally interacting. Individual ways of being and behaving are expression of this interaction of roles in combination with a series of personal attributes (abilities, interests, life story, cultural and social components, genetics aspects, etc.). Thus, each individual is represented by a personal universe of interactions. These individual universes of roles complexifies when people interact with other people expression of the same complexity of roles. Role-play allows exploring how personal individual and social roles interact with others' individual and social roles.

1.5 Major applications of pshychodramatic methods

The most common field of psychodrama application is the area of mental health, hospitals, alcohols and drugs programmes, therapeutic groups. Often its techniques are integrated in support to individual, group, marital counselling and family therapies. The psychodramatic methods are also used to help young people to explore emotional conflicts in their lives according to different age ranges and context: school, home, recreation and treatment centres, classrooms. The stage of the action is often the actual playground where the conflict occurred. When modified for the setting, psychodramatic methods can also be used to support children with relativity deficiency of cognitive and verbal skills (mental retard or adolescence delinquency). In addition psychodramatic techniques can be integrated with other activities, such as storytelling and play.

In the form of role-play and sociodrama, the psychodramatic methods can be applied to many settings in primary and secondary education. It is important to contain personal exploration involved in psychodrama within a setting which a context of peer is not appropriated to a great level of self-discovery. Some of these context are listed as follows: 1) discussion of class material; 2) family life education programmes for exploring dating, marriage relationships, conflict resolution; 3) creative drama, more based on improvisation then prescribed scripts; 4) special situations involving issues concerning for example, parent-student conflicts, ethnic strife, alcohol abuse programmes; 5) special education, which refers to special classes for people with learning disabilities that are helped with problems related to defeatism, poor selfesteem, behaviour problems, crippling disabilities, diabetes, deafness, blindness. Special classes can also include children with severe emotional disturbs, psychotic or problems with hyperactive, impulsive behaviours; 6) learning about feelings, refers to what is also known as emotional intelligence (EI), education regarding emotions and feelings experienced, teaching children to recognise personal emotions and learn how to manage those feelings along with the development of coping skills in interpersonal relationships (soft skills).

A recent and important area for the application of pshychodrmatic role-play methods regards professional training and industry. The major application of role-play in both contexts is to develop interpersonal and intrapersonal skills (soft skills) of professionals, employees, managers, personnel, and staff. A special attention has been given to the enhancement of sensitivity for students in training for professions of help, such as nurses, teachers, policemen, doctors, and so on.

Increasing attention is being giving to the area of soft skills, as competencies complementing any spheres of human life, whatever is related to personal, public or professional aspects. For soft skills, also called people skills, we mean interpersonal and intrapersonal competencies enabling to effectively interact and communicate with the multitude of environments we interact with, both at personal and professional level. Blatner (2006) for example with regard to the use of the sociodramatic technique in education argues as role-play is the best way to develop soft skills such us of initiative, communication, problem-solving, self-awareness, and working cooperatively in teams. As also Bollens and Marshall (1973) have highlighted role-play finds particular application in relational contexts, typically in such areas as counselling and soft skills training.

A following paragraph will be entirely dedicated to the controversy around various definitions of soft skill, as identified from a search and review of the skills literature; therefore we refer to that paragraph for a more detailed discussion.

Role-plays applied in educational and training settings can also create a stimulating opportunity for simulating particular events or situations in order to help mastering key aspects of a specific theory or to intensify understanding of a certain topic of study. People can practice and exercises skills, explicit and rehears individual and group effective behaviours in a non-treating and non-judgmental environment through the interaction of different roles. In role-play there is always a chance to learn from one's own mistakes as they are source of self-reflection.

The use of sociodrama, psychodrama and simulations in learning settings recognize that people learn best "by doing", by acting through experiential modalities of learning.

For example educational role-play in psychodrama can focus on representation of professional roles associated to real working contexts in order to investigate personal emotions, fears and expectations associated to that role. This process can help protagonists to disentangle roles from unpleasant perceptions, regain a more effective vision, seeing the potential of possible personal evolution of the role and within the role.

Sociodrama can focus on political, organizational, collective issues (e.g. economic crisis, abortion, organizational culture change, immigration streams, and so on) played out by groups of people. Role reversal, mirroring and doubling foster deep and truly understand of people and problem, contribute to identify values, convictions, and perspectives and expand people's mental maps with new perceptions and experiences.

Simulation for example, can focus on a specific theoretical area (leadership, negotiation, decision making) that is translated into experiential role-play activities. These are designed in order to complement mere acquisition of knowledge and support learners to master practical aspects and relational dimensions that can be related to a specific theory, and to apply what learnt to real life contexts and situations.

According to the identified training needs, group of students are asked to assume and performed the assigned roles and interact to each other. Supported by trainers, students not directly involved in the performance, assume the audience-observant role, by recording behaviours and dynamics occurred related to the goal of the simulation. Protagonists on the scene and observing participants can be both involved by trainers in performing the roles of double, reversal and mirror, as tools of psyco-sociodramatic tradition.

During the simulation for example a player can be invited to exchange his with another role so to understand situations experienced by other people, while observers can be asked to play the role of the double with the aim of helping players to become more aware of feelings and thoughts not completely expressed. Once the simulation is concluded a debriefing process takes place. This post-game session allows players, observers, and trainers to share feelings experienced, examine and discuss behaviours acted, explain and elaborate individual as well as group experiences and results (Kozma et al., 1978). As Thatcher (1990), Petranek and colleagues (1992) have also pointed out, the value of this debriefing process is crucial because throughout the discussion engaging both trainers and trainees, learners are helped to clarify their objectives and reflect on their learning.

Role-play is also used in assessment settings. When applied for selection process purposes they can support to understand how a person would act when placed in an imagined or real role of pretended problematic situations. Conversely when used within potential development processes, role-play are a useful tools for investigating and assessing competencies that could match with key roles or core activities within the organisational structure.

Role-play simulations have been employed across a wide variety of disciplines, topics and subject matters. Towards more conventional methods the benefits of using simulations have shown to enhance learners' motivation and interest, promote a positive impact on attitude change (Pierfy 1977; Bredemier & Greenblat, 1981; Van Sickel, 1986), as well as may provide better behavioural, cognitive and affective learning, and personal understanding of social issues and events (Bredemeier & Greenblat, 1981; Foster et al., 1980; Hankinson, 1987).

1.6 Soft skills

As it has been previously discussed one of the major current application of role-play is to develop interpersonal and intrapersonal skills (soft skills), professionals, employees, managers, personnel, and staff, within group of peers, or more in general familiar and social relationships. The following paragraph will be dedicated to the controversy around various definitions of soft skill, as identified from a search and review of the skills literature.

1.6.1 What are soft skills and why they are important

Since Daniel Goleman published his work on Emotional Intelligence (EI) in 1995 placing the family of soft skills at the heart of learning and personal development, the appreciation of these skills has progressively increased. They are crucial both to life and business, because they affect how people learn and develop. As they involve intra personal as well interpersonal dimensions, soft skills help to manage ourselves, create and maintain effective relationships, and understand others.

There has been a growing recognition by researchers, managers, representatives of industry commerce and organisation, educational policymakers, that "soft skills" are crucial to promote personal and collectively growth for creating new practice in professional, vocational and educational contexts. Today soft skills are recognised as transversal competencies existing in reciprocal relationship whit hard skills (technical and task-job specific knowledge). As there is no formal and unique definition of soft skills, they are also referred with a multitude of terms such as, emotional intelligence (Sjöberg, 2001; Goleman, 1995; Bar-one, 1997; Salovey & Mayer, 1990), social intelligence (Marlowe, 1986; Sternberg, 1985), life skills (Gardner, 1993), social competence (Oppenheim, 1989; Zigler, 1973), managerial competencies (Mcclelland 1998), Interpersonal skills (Skulmoski and Hartman 2010).

A possible attempt of a comprehensive definition encompassing what is intended and described as soft skills in literature could be the following: Soft skills are not domain- or practice-specific (Boyce et al., 2001) experientially based (Sukhoo et. al 2005), are both self (Gardner 1993, Moss and Tilly, 1996,) and people orientated (Duffy et al 2004); task-related behaviours (Duffy et al 2004; Hayes 2002); as inextricably complementary to hard technical knowledge and skills enabling completion of activities and accomplishment of results (Kantrowitz, 2005). Details on the definitions identified from a search and review of the soft skills in literature, will be given follow.

As soft skills are related to personal characteristics, acquired through experience and with regard to the relational contexts of reference, they can be exercised within "learning by doing" environments that enable opportunities for practice and on-going and constructive feedback (Kajnc & Svetlicic, 2010). As they are they are fundamentally behavioural can be learned through training and development, unlike intelligence and personality (Mcclelland, 1998). Because of their intrinsic nature of being real-world oriented and developed within real-word situations soft skills training programmes, mainly conducted

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in face-to-face settings, employ a series of active methods including group discussions, interactive exercises, role-play simulations, case studies.

Soft skills are crucial for employees who needs to manage their interactions and emotions in order to interact effectively with customers and get engaged with the workplace missions; they are essential for management and leadership skills as they help leading teams to common and shared goals, accomplish organisational missions and support organisations in their future directions and visions. Soft skills are important for students as they are linked to job performance and career development.

1.6.2 Beyond the concept of intelligence

There has been a growing attention around "soft intelligences" such as intuitive, practice and emotional intelligences (McGurk, 2010), as they have drawn on recent scientific developments in biology, psychology and cognitive neuroscience.

In1983, Howard Gardner Professor at Harvard in Education, by introducing the concept or multiple intelligence challenged the hegemony of the IQ concept that considers intelligence as being a single measurable entity predicting mental capabilities and as a genetically inherited characteristic not increasing through adulthood. He suggested that intelligence is constituted but a wide range of talents not considered within the traditional IQ tests. The idea of multiple intelligences is a broad flexible concept constituting by several separate intelligences.

Gardner and colleagues agreed on the definition of the first seven intelligences after having examined a vast literature regarding the "development of cognitive capacities in normal individuals, the breakdown of cognitive capacities under various kinds of organic pathology, and the existence of abilities in special populations, such as prodigies, autistic individuals, idiots savants, and learning disabled children"... "forms of intellect that exist in different species, forms of intellect valued in different cultures, the evolution of cognition across the millennia, as well as two forms of psychological evidence, the results of factor-analytic studies of human cognitive capacities and the outcome of studies of transfer and generalization"(Gardner & Hatch, 1989).

Intelligence is defined as a set of abilities and skills that all individuals possess. They differ only in the level of their skills and how these intelligences combine. No type of intelligence is more important than the other, as people can be intelligent in many different ways.

Intelligences can involve different areas such as communication (verbal and non-verbal), the ability to see situations from another perspective, create positive relationships with others and being competent in resolving conflict with others in positive manners.

In his first work (*Frames of the Mind: The Theory of Multiple Intelligences*, 1983) Gardner proposes that there are seven possible intelligences—linguistic intelligence, logical-mathematical intelligence, musical intelligence, bodily-kinaesthetic intelligence, visual-spatial intelligence, interpersonal intelligence, and intrapersonal intelligence. In a later book in 1999 *Intelligence Reframed: Multiple Intelligence for the 21st Century* he discussed the possibility of adding three more intelligences to the list of the original seven: naturalist, spiritual, and existential intelligences. At the end Gardener concluded that the first of these merits addition to the list of the original seven intelligences.

A brief definition of each of the 10 intelligences is listed below.

Linguistic intelligence: the ability to use spoken and written language to express themselves effectively, to understand people and to accomplish certain goals and.

Logical-mathematical intelligence: the ability to analyse problems logically and investigate issues using the scientific method. It entails the ability to detect patterns, reason deductively, and think logically and is associated with scientific and mathematical thinking. People highly capable of thinking conceptually and abstractly have high Logical-Mathematical intelligence.

Musical intelligence: the capacity to think in music, being able to hear patterns, recognizes, and manipulate them. It involves learning through sounds patterns, rhythms and music. This includes not only auditory learning, but the identification of patterns through all the senses. Those who have high musical intelligence also have the ability to perform, compose, and appreciate music and music patterns. According to Gardner, musical and linguistic intelligences are concomitant and operate in parallel with each other.

Bodily-kinaesthetic intelligence: the potential of using the whole body or parts of the body to solve problems (Hayes, 2006). It entails learning through interaction with one's environment and promotes understanding through concrete experience.

Visual/Spatial intelligence: the ability to recognize, anticipate and visualise problems and solutions; to manipulate and create mental images in order to solve problems. People with high levels of Visual/Spatial intelligence are sensitive and aware of their environments. According to Gardner it involves the potential to recognise and use the patterns of space and more confined areas (Smith, 2008) and the ability to manipulate and mentally rotate objects.

Naturalist intelligence: the ability to recognize, categorize and draw upon certain features of the environment. It is the intelligence that presumably helped our ancestors survive, "to decide what to eat and what to run from" (Holmes, 2002).

Existential intelligence characterises individuals who exhibit the proclivity to pose and ponder questions about life, death, and ultimate realities (Wilson, 2005).

Spiritual intelligence: the ability to explore the nature of existence in its multifarious guises

It includes the capacity to face and use suffering, the capacity to face and transcend pain, the capacity to be flexible, actively and spontaneously adaptive, and high self-awareness (Zohar, 2012).

Two of the areas of intelligence identified by Gardner are closely related to the definitions of soft skills. These are the two inextricably interconnected personal intelligences: inter-personal and intra-personal. It is through sensitivity to ourselves (intrapersonal intelligence) that it is possible to relate and understand deeply to other people; likewise it is through sensitivity to other people (the interpersonal intelligence) that we can get in contact and know ourselves. The personal intelligences are indissolubly related with the symbol systems supplied by people's culture (rituals, religious codes, mythic and totemic systems) which provides a way, a map to make sense of the experience of self and others. Gardner (2006) clarifies that "interpersonal intelligence builds on a core capacity to notice distinctions among others, in particular, contrasts in their moods, temperaments, motivations, and intentions". Interpersonal intelligence is the ability to understand people's intentions, motivations, and desires. This according to Gardner builds on a core capacity to notice distinctions among others, in moods, motivation and intentions, and then highlights the appreciation of others' contributions.

Intrapersonal intelligence grounds on the capacity to understand oneself, to be aware of and recognise personal feelings, fears and motivations. This intelligence has to do with introspective and self-reflective capacities. Individuals sensitive to self-reflection are able to observe themselves in relation with others and assess with a certain level of accuracy, personal strengths and areas that need to be further developed, and predict and manage their own reactions and emotions. This intelligence entails to possess an effective model of oneself and being able to use such information to regulate interactions and relationships in lives.

Despite of the criticism towards the idea of MI considered as an ambiguous and subjective concept that cannot be validly and objectively measured, it offers valuable insights about new alternative ways of thinking about learning and education. This approach highlights how learners are intrinsically different and thus the importance of providing flexible programmes and active methods within professional practice in order to address individual needs. In this respect the educational implications of the model proposed by Gardner stands in a direct line with and from the work of J. Dewey (1966) and D. Kolb (1975).

Although Gardner's concepts have also business relevance, the concept of MI was developed within areas of educational. Other concept of intelligence such as intuitive, practice and emotional intelligences were instead developed with business applications in mind.

In the same decade Wagner and Sternberg defined practical intelligence as "purposive or successful adaptation in real-world context" (1985). Purposive means that intelligence is directed towards goals, and is showed by our attempts to adapt to the environment we interact with. According to Sternberg, by this definition intelligences incudes whatever characteristics lead to such adaptation and the latter includes changing the environment or selecting a new one if necessary. In this perspective the way to progress our knowledge of intelligent functioning consists in comparing individuals who have had varying degrees of success in adapting to a given set of demands and challenges of the real world, in order to understand the characteristics that differentiate people (Klemp & McClelland, 1986).

This view also point on experience within our environment, as major source for acquiring knowledge and skills. One measure of the ability to learn from experience is the acquisition of "tacit knowledge". Tacit refers to the knowledge not explicitly taught or even verbalized that individuals need to know in order to get along in daily life. Sternberg considers the acquisition and utilization of tacit knowledge, often characterized as "street smarts" or "common sense," to be an aspect of practical intelligence. (Sternberg et al., 2000). Manifestations of practical intelligence are 'professional intuition' or business 'instinct'. These two terms characterise the tacit quality of knowledge associated with individuals who are successful in their respective domains and reflect knowledge that was not taught in school nor read in a textbook or manual.

Around the same period of time, at the beginning 1980, management consultants began challenging the notion IQ as associated to business and career success. McKinsey and colleagues found that the most successful companies tend to put more emphasis on what they called the four soft Ss – style, skills, staff and shared values, than on the three hard Ss – strategy, systems and structure. A brief description of the concepts associated to the four Ss is reported below.

Style is expression of the leadership and management style adopted by top management. In other words, represents the cultural style of the organization and how key managers behave in achieving the organizations goals.

The concept of Staff includes human resources part of organizations and its development as individuals than can make more effective contributions to corporate goals.

Skills regard to the set of core competencies in organisations, sustained by learning and training.

Shared values represent the set of values or aspirations that underpin what a company stands for and believes in. It is when these goals are shared throughout an organization and become common that individuals support each other and bring efforts in the same direction.

Organisations able to use and cultivate the concepts represented by the 4 S, promote organisational cultures encouraging personal as well as group initiative, development and responsibilities. This underpins efficacy, efficiency and effectiveness of organisations.

Also Goleman pointed out as a set of competencies such as self-confidence, initiative and teamwork can make significant differences in the performance of individuals that positively affect organisational effectiveness and performance.

The construct of EI introduced by Goleman incorporates the complexity of a person's capability and focuses on EI as a wide array of competencies and skills that drive leadership performance. Goleman describes EI as "...a trait not measured by IQ tests But as a set of skills, including self-awareness, self-regulation, motivation, empathy, and social skill, as competence in interpersonal relationships" (Goleman, 1995:73).

Goleman found that the most effective leaders in organisations have a high degree of emotional intelligence, and states that technical skills are relevant however they do not make alone great leaders.

He claims that the capability of managing oneself and the ability to relate to others, accounts twice as much as hard technical skills in job success. Goleman (1998) basing further claims on extensive research on more than five hundred organisations, proves that factors such as self-confidence, selfawareness, self-control, commitment and integrity not only create more successful employees but also more successful business and companies. In particular he affirms that a high level of individual success at work is characterised by EI, or skills of social awareness and communication. Typically, these include the ability to motivate and influence others, to give effective feedback, to develop relationships, to monitor one's own behaviour, to manage emotions both of self and others, and read interpersonal situations.

As a result of the research done by Goleman, employers appear to be more willing to invest in soft-skills development, especially at the higher management levels. In recent years because the corporate environment has drastically changed, there has been a growing awareness of the importance of soft skills. The process of evaluating and understanding the strengths and weaknesses of employees can help to implement transformative learning and in so doing, enhance key skills.

Moreover Goleman's study reveals not only that EI is important, but also demonstrates that the skills that contribute to emotional intelligence can be taught and developed over time.

More recently Pink (2005) has claimed that focusing on the development of soft aptitudes is the only way for individuals, firms and organisation to stand out in a crowded market place mostly driven by three main forces: lower labour costs (Asia); increasing demand for products or services that are pleasing and appealingly (abundance); machine and computers substituting what once only people were able to do (automation). Pink claims that we should shift our attention from skills such as linear thinking, analytic hard logic, and step-by-step methods of problem solving to the development or refinement of our interpersonal soft aptitudes. They involve persuasion, communication, self-understanding, creativity, the ability to detect patterns and opportunities, combine apparently unrelated ideas into a novel invention, empathize, play, understand the subtleties of human interactions, and stretch in pursuit of purpose and meaning.

Recently there also has been a growing interest of research in business and management related to intuitive intelligence and a number of authors have proposed and used the term 'intuitive intelligence' (e.g. Dreyfus and Dreyfus 1986; Sadler-Smith and Shefy 2004). They have suggested that intuitive intelligence has three main attributes (Sadler-Smith and Shefy 2010): Expertise, Understanding and Self-awareness, as outlined below:

Expertise: refers to informed intuitions, as opposed to simple and naïve guesses. They are based on an in-depth knowledge of a certain domain (for example nursing, banking, etc.) and draw on tacit knowledge built up over many years of learning, experience and feedback (Simon 1987).

Understanding: being intuitively intelligent requires knowledge, understanding and appreciation of his own intuition, how it differs from instinct and insight, how it works, and when it is likely to help or hinder (Hogarth 2001).

Self-awareness: involves being aware of own intuitions recognising when they occur, and being able to distinguish between intuitive feelings and emotional feelings, learning and understand how personal biases and prejudices can affect and contaminate intuitions (Sadler-Smith and Shefy 2004). In addition to these, there are other intuitions having soft skills relevance, such as social intuition (related to the capability of quickly assessing what other people might feel or think, their intentions and motives); creative intuition (referring to an instinctive feel that occurs in advance of a creative idea or insight, and that can suggest a favourable direction that might be followed; the creative outcome combines knowledge in novel ways not previously thought of); moral intuition (a rapid and automatic feeling that comes in response to an ethical dilemma. It offers an emotional signal as to whether or not a particular course of action is morally correct).

Moreover, the area of soft skills has been biased by unhelpful theoretical models, often based on popular "neuromyths", as for example on the assumption that intuition is in the "right brain". Recent findings of cognitive neuroscience and theories from psychology have provided useful frameworks that help to understand soft intelligences. For example Emotional Intelligence is explained in terms of interaction between different areas of the brain, the amygdala (the emotional brain, (Goleman, 1998)) the prefrontal cortex (the
working brain (Goleman, 1998), where emotions are reasoned and processed), the sensory cortex (centre of perception and short-term storage), and the hippocampus (long-term memory). Goleman writing about the most recent discoveries regarding relationships between emotional and thinking brain cites the work of Le Doux (1995). He states that the "architecture of the brain gives the amygdala a privileged position as the emotional sentinel, able to hijack the brain" (1995). Le Doux's research has shown that in case of high states of alerts or crises sensory stimulus from eyes and ears go directly to the thalamus and then reach the amygdala. Then a second signal from the thalamus is directed to the neo-cortex. The branching of the signal allows the amygdala to respond before the neo-cortex, that means that the emotional brain receives the information first and then reacts before the thinking brain has received information, and can elaborated and ponder the most appropriated responses. This discovery is considered revolutionary, as it works out the neural pathway circuit for feelings bypassing the neo-cortex and directed to the amygdala straightforward. It includes our most primitive and potent emotions that one day were essential for the survival of the species, such as fear, anxiety, anger, and lust. M. Lieberman (2007) found out the presence of an inverse relationship in the activation of the amygdala and the prefrontal cortex. The activation of the amygdala with increased levels of blood and oxygen is associated with a less activation in the prefrontal cortex. This affects our thinking power and disrupts our problem solving process.

The studies of Lieberman have shown that tasks involving intuition are associated to three areas of the brain: amygdala, basal ganglia and lateral temporal cortex, comprising what he calls X system (where the X stands for the X in reflexive). The reflexion model of judgment proceeds spontaneously and automatically without a controlled judgment process is necessary. This system comprises of our implicit theories, stereotypes, and expectations that allow us to interact smoothly with the environment around us. When the automatic process fails in achieving our goals, a controlled decision making process intervenes. He stated that "*In contrast to the X-system's efficiency with social phenomena that conform to its generalities, the C-system is critical for*

handling the exceptions to the rules" (Lieberman, 2003). The C system (where the C represents the C in Reflection) includes the following three neurocognitive areas: anterior cingulate cortex, prefrontal cortex, and the medial temporal lobe, including the hippocampus.

This perspectives goes beyond the out dated idea that intuition and creativity (soft skills) are hosted in the right hemisphere while rationality and analysis (hard skills) in the left; instead a variety of different areas distributed across the brain are involved in these processes (Lieberman 2007).

1.6.3 Defining soft skills

Soft skills have been a significant challenge for practitioners, policymakers, trainers and researchers because of a lack of unique definition and a specific conceptual framework for understanding soft skills domain. This has been result of a series of imprecise and erroneous perceptions around the area of soft skills, mainly related to the difficulty of understanding what they are exactly and to the idea that they are vague, indistinct and indiscernible.

The attempt of gaining greater clarity and a more precise conceptual weakness around this concept has produced a significant number of definitions of soft skill that will be examined below.

Proctor and Dutta (1995) offer a general definition of skills, reported as follows: "*skill is goal-directed, well-organized behaviour that is acquired through practice and performed with economy of effort*" (Proctor and Dutta 1995, p18). In literatures it is possible to identify a variety of perspectives and distinction between knowledge, skill and competencies. For the purpose of this work we will refer more specifically to the distinction literatures between soft (e.g. Klaus et al., 2007; Pant and Baroudi, 2008) and hard skills (Clark, 1993; Wellington, 2005; and Rainsbury, Hodges, Burchell and Lay, 2002) used in the policy and practice literatures. As will be described following, they differ in many different ways.

However neither soft skills nor hard skills can be considered better than the other, as they are complimentary and good for being applied to a diversity and variety of things and situations. Hard (technical) skills are defined as goaldirected behaviours that draw on the capability to perform a specific task within a specific area or domain. They refer to education, knowledge, training and experience. Soft skills instead focus more on individual and relational spheres, thought as we will see following are often employed in response to the demands of a task in order for this to be efficiently completed.

In examining the content of the definitions existing in literatures, it is possible to summarise that soft skills have been unpacked into a number of components such as, personal behaviours (intra-interpersonal dimensions), personal attributes (personality characteristics supporting soft skills), domain attributes (distinguishing soft skills from hard skills), and outcomes toward which soft skills are directed.

According to these distinctions, following we provide definitions identified from a search and review of the soft skills in literatures that put the accent more on one of the three dimensions than the others, although they often shade into each other area of definitions.

Below are listed the positions pointing more on personal and relational attributes as key components of representing soft skills.

Kajnc and Svetlicic (2010) emphasise that soft skills refer to a knowledge which is intangible and difficult to quantify, codify, store, and transmit, because it relates to more personal characteristics and includes judgement and experience. These are internalised skills acquired with experience and practice.

Duffy et al (2004) state that soft skills are interpersonal, as they are relationally oriented; they have potentially significant effects on others through verbal and non-verbal channels of communication, for example relieving anxiety or establishing a trusting relationship.

Pratt et al (2010) state that the most valuable employees to organizations are able to forge partnerships, build relationships, communicate effectively with the business, and find creative ways to manage costs.

A more broad definition is proposed by Boyce et al (2001). They refer to a range of educational skills that are not domain or practice specific, including communication and interpersonal skills, problem solving skills, conceptual, analytical and critical skills, visual, oral skills, judgement and synthesis skills.

According to Moss and Tilly (1996), soft skills refer to skills, abilities and traits pertaining personality, attitude, and behaviour rather than to formal technical knowledge.

Giloth (2000) argues that are skills related to critical thinking, oral communication, personal qualities, and interpersonal and/or teamwork; many of these skills are shaped by structural changes in the economy, technology and new forms of work organization.

Jeyaraj (2010) refers to soft skills as the communication and interpersonal skills required to elicit the activities performed by different stakeholders.

For Bacolod et al. (2009) are the skills that any worker needs for engaging effective and productive interpersonal interactions.

Other definitions point more on the character of being goal-directed behaviours, essential for facilitating efficiency in workplaces enabling goals of individual, teams and organisations to be pursued.

For Jackson (2009), for example, they are the skills considered crucial for enhancing productivity and innovation in the workplace.

James and James (2004) agree that soft skills describe a set of abilities that individuals can bring to the workplace. They characterize certain career attributes that individuals may possess such as, work in teams, communication, leadership, customer service, and problem solving skills.

Other definitions of soft skills focus on interpersonal and interpersonal dimensions, and highlight their value as predictors for potential development and job suitability.

Chia (2005) argues that soft skills include communication, interpersonal and intrapersonal, thinking skills, and capability of effectively managing stress. They are factors that offer indications of job suitability for specific candidates.

Similarly, Ranade et al. (2010) describe soft skills as behaviours that make employees effective in their roles and make possible to distinguish some candidates for positions of leadership. In this perspective soft skills support the goals of individuals, teams as well as organisations. Perreault (2004) defines soft skills as personal qualities, attributes, or the level of commitment of a person that set him or her apart from other individuals who may have similar skills (hard/technical) and experience.

Other definitions pointing on domain attributes are helpful in distinguishing soft skills from hard skills.

Skulmoski and Hartman (2010) define soft skills as interpersonal skills, while hard skills as domain and discipline specific.

Kantrowitz et al. (2002) describe soft skills as the interpersonal, human, people, or behavioural skills that facilitate the application of technical skills and knowledge in the workplace.

Weber et al. (2009) pointed out that hard skills are associated with the technical aspects of performing a job. While these skills usually require the acquisition of knowledge and are primarily cognitive in nature, soft skills are defined as the interpersonal, human, people or behavioural skills. They are essential to apply technical knowledge and skills in the workplace.

Klaus et al. (2007) define soft skills as non-technical traits and behaviours needed for successful career navigation that allow to more effectively use technical abilities and knowledge.

Other definitions of soft skills focus more on managerial factors enhancing performance and effectiveness of workplace, as they facilitate and support leadership and management behaviours.

Sukhoo et al. (2005), for example define soft skills as often concerned with managing and working with people, ensuring customer satisfaction and creating a conducive environment for the team to deliver high quality products within budget and on time, and exceeding stakeholder expectations. They are acquired through experience. Based on tacit knowledge soft skills are acquired "learning by doing" in environments that give opportunities for practice and on-going and constructive feedback.

Joseph et al. (2010) under the definition of soft skills include managerial, intra-personal, and interpersonal skills that are applied to resolve problems related to the workplace.

Muzio et al. (2007), refers to soft skills as micro-social skills, such as team building, leadership, management, planning skills team building. They are differentiating factors that allow truly understanding needs of customers, and engaging effectively with key stakeholders. Moreover soft skills are the skills that allow a person to better understand his own actions, how to work better in teams, and, how to be more productive and successful (Muzio and Fisher 2009).

In examining these definitions it is possible to individuate different factors of soft skills as well as the ways they differ to hard skills.

A possible attempt of a comprehensive summary encompassing what is intended and described as soft skills in literature could be the following. Softskills are acquired through experience, through "learning by doing"; they are both self and people oriented; they complement the use of hard skills and enable individuals to manage successfully requirements, challenges and opportunities of their job role in pursuing personal, team or organisational goals, as well as personal lives. They are task related, as well. This means that they are employed in response to the demands of a task, to support the application of a harder skill in order to obtain the completion of a specific task.

In relation to hard skills they are detected as more based on experience than on specific rules of procedures as per hard skills. They are less specialised and more transferrable than hard skills, and their outcomes are less predictable and measurable than technical skills. They are oriented more on people and significant interactions than specific domain oriented.

However soft and hard skills exist as part of a skill continuum. If we refer to the task related soft skills, these can be considered harder than people-related and self-related soft skills, and seen as a bridge between soft and hard skill domains; moreover they exist in reciprocal relationship, as one without the other does not make possible people to fully express themselves and their capabilities.

CHAPTER 2. Traditional settings and new technologies for role-play implementation

2.1 Role-play in traditional settings

As previously introduced, because its intrinsic nature of being vehicle for learning, role-play technique has been wildly used in therapeutic, psychological, sociological, educational, and organisational settings.

Role-play is used to create simulated scenarios where individuals are assigned specific roles to enact specific defined situations within a system of rules or guidelines (Bett et. al, 2009). More specifically role-play exploits its learning potential through the interactions between group members enabling both individual and group learning and change.

As previously discussed, role-play derives from psychodrama and sociodramma, methods introduced by J. Moreno for investigating respectively individual and social problems and dynamics, or more specifically, as a way to heal both individuals and groups (Sternberg and Garcia, 2000).

The so called classical Moreno psychodrama has been adapted and integrated with a variety of therapeutic approaches such as gestalt, behavioural, family, and psychoanalytic group therapies.

Although psychodrama is most often used as a form of group psychotherapy, Moreno believed that this method should also have been made available to the general public in order to benefit people who were not psychotherapy clients.

He always tried to show that his method was meant as much more than a psychotherapeutic method, as his idea empathised as creativity and spontaneity affect our involvements in every sphere of our lives.

For example people might wish to experience the psychodramatic method for educational purposes or for personal growth or for increasing emotional fulfilment. From the same perspective, role-play for psychodramatic as well as sociodramatic methods may be effectively integrated in many field aside from psychotherapy, that require some exploration of psychological dimension of a problem or situation such as education, training programmes, organizational development and change, consulting to business, self-help groups sense, industrial relations, mental health, primary and secondary education. Therefore psychodramatic tecniques can be employed to address socio-economic issues, social conflicts in communities, professional sub-groupings, group and organisational climate changes, workplace and public relationships, peer and parental relationships (Blatner, 2000; Betts, 2009; Zanardo, 2011).

According to Blatner (2006) understanding and dealing with the issues of the contemporaneity often require of experiential and participatory learning integrated with verbal, as well as cognitive analysis.

An interesting broad definition of learning simulations that poses the accent on the differences between therapeutic and learning applications of sociodrama, psychodrama and role-play is proposed by Betts. Learning simulations comprises of a set of pedagogical techniques and strategies that that engage individuals in real - life scenarios through role-plays, sociodramas, psychodramas, gaming, and reflection activities (Betts, 2009)

Depending on the specific settings in which they are applied, role-play shares similar principles and dynamics. Irrespective of the possibility of exercising specific skills as well as deal with personal or collective issues roleplay tools are recognised as an effective vehicle for accelerating learning and stimulating interpersonal and intrapersonal communication. Role play encourage new ways of thinking and interacting with things and people of our personal environment. This technique uses a variety of dramatic devices derived from sociodrama and psychodrama, such as replaying a scene or a part of a scene, role reversal, making asides, mirror and double. These enactment tools facilitate learners to explore their emotions, concepts and thoughts from a detached perspective and the development of metacognition capacity, what is the ability to think about the ways one thinks (Weinert & Kluwe, 1987), thus is an effective method for fostering the skill of empathy and self-awareness. In the double a group member (auxiliary) takes the role of the inner voice of the protagonist, helping to express and clarify feelings, thoughts, or experience unspoken and unaccepted by the individual. In role-reversal participants are invited to temporarily exchange their role in the drama with others' roles. In using the mirror technique the protagonist steps out of the scene, while another member (auxiliary-ego) is asked to replay the role and behaviours portrayed by the individual. The protagonist can be involved into a psychodramatic scene contemporarily either as outside of the situation being represented by auxiliaryegos, and as active participant in role-reversal or mirroring positions. A crucial role is played by the role-play director, who guides, coordinates and monitors the process. The director (who according to the context of role-plays setting applications, can be a psychologist, teacher, trainer, educator, consultant or therapist) facilitates the role-play enactment and more specifically suggests possible actions to be undertaken, according to the needs expressed by protagonists and or the group. He can review and correct the performance, invite protagonists to play different roles, exchange parts, introduce, support and instruct the auxiliaries' players.

After the simulation is completed the director invites all participants including audience and auxiliaries to a self-reflection and discloser process of what the enactment meant in terms of personal and group experience.

One of the key aspects supporting self-awareness enhancement is represented by the personal dialogue that participants can entertain with the director during the pauses allowed in the action. From this pausing and the feedback offered by the director, learners can experience the so called phenomenon of role-distance. Through this process the player can metacommunicate with the role he represents, as he is encouraged and supported to look at himself in the performance "from the outside", considering the different point of views of other players, as well as, audience. This process helps to develop the competency of building mental flexibility and creative adaptation. We can assert that role-play technique develops a type of knowledge transcending the procedural knowledge that regards the understanding of possessing a certain skill and knowing "how" to do things. In fact role-players are involved in experiences concerning a level of conditional knowledge that refers to being aware of the "why" and "when" to apply various competencies to different and specific situations. Among many, two key characteristics of role-play emerge from this discussion. One is related to the role of the director who, as we have introduced, according to the setting of role-play applications can be referred as therapist, educator, trainer, coach, consultant, or psychologist. Within a specific setting he defines scenarios to be performed harmonising roles to be explored, feedback and debriefing processes with players, as well as group's needs. The other characteristic remarks that role-play are activities implying a level of growth and experiences that can be possible because of the presence of a group.

Indeed, as we have already explored in the first chapter, peculiarity of roleplay activity and its learning potential is represented by the interactions between members of the group involved in the enactment. Regardless of the nature of problems or dynamics represented either at individual and social level, the group itself represent the metaphorical stage allowing roles and dynamics to be revealed and disclosed.

Following a review of online role-play examples, main features and proprieties of EMORPG e-learning platforms and its application in different contexts are described.

2.2 Role-play in digital environments

The advent of personal computers and Internet has dramatically changed the domain of applicability of role-play techniques, by allowing the exploration of novel settings, based on artificial and digital environments. Indeed, the use and the growth of online games have been swift and widespread in the last decade, due to the growth to the use of Internet and the development of Web 2.0 and it is consistently more and more evident the intrinsic power of this form of games for engaging large groups and number of people for significant periods of time and create community culture, and sharing common interests and objectives.

The literature has already highlighted the increased interest around online games as a medium for learning and demonstrates how these could be adopted within education and training contexts (Squire, 2003). Within this context, particular attention has being paid to games that should encompass both the engaging and immersive principles of games and the effectiveness of simulations as a meaningful learning space (Martens, 2008). From this perspective, the key challenge for effective learning games is creating experiences that are engaging, motivating, and interesting for learners that need to be supported through a system of feedback, reflection, and transference to real life situations. Therefore the consideration of using games for learning purposes has been changing in recent years and especially the perceptions about the suitability of commercial-off-the-shelf role-play simulations and games to support learning (Egenfeldt-Nielsen, 2007), as well as skills assessment (Gee et al., 2010). The key to success for e-educational RPSG resides in being different from commercial video games pursuing different objectives from education and workplace skill acquisition. Moreover its development cannot compete with multinationals millionaire budgets.

Researchers, psychologists, tutors, educators and game developers have recognised the importance of working together to draw a system of principles that could help in the design and use of games as effective learning tools. In this domain, role-play and simulation games can be conceived as tools that can boost effective learning when appropriately integrated in a training program designed on specific learning objectives and desired outcomes.

Although in literature there is no unique definition of game for learning purposes, serious games, simulations and virtual worlds can been seen as points along a continuum, when the game is rigorously designed and implemented according relevant learning goals and provide a structure ensuring learning (Aldrich, 2009; Carr et al., 2010). Those are all forms of experiential learning activities used for enhancing or developing different skills, at different levels (procedural knowledge technical and vocational skills, social and soft skills), with distinct purposes and in multiple environments, such as health, military, education, training, and vocational areas.

2.2.1 Examples of digital role-play games

As this work aims to focus mainly on role-play simulations for boosting effective learning processes, our interest will be directed on the implementation of digital role-play setting and some platforms which have been specifically designed for role-playing simulations.

It has been already said that role-play methodology derives from psychodrama and sociodrama (Moreno 1943) and that they have been adapted and applied to various domain, such as psychotherapy, education, business, organizational and training settings for intensify and accelerate learning. Recently, a variety of factors such as the introduction of the internet, the progressive development of new technologies, the newest communication social systems, the innovative applications of the Artificial Intelligence have allowed role-play to be performed on a computer screen and on a number of other platforms including consoles and portable devices.

Role-play in e-learning environments provide a learning experience where both interactive (Wills et al., 2002) and reflective (Laurillard, 2002) dimensions take place.

Among the possible implementation of role-play-games for learning purposes, Multiplayer Online Role Play Games (MORPG) are one of the most powerful forms of modern gaming avatar based role-plays. One of the most successful examples of this kind of virtual worlds is *Second Life* (SL).

The potential of using *Second Life* and other immersive virtual words initially created with social and entertainment purposes for supporting educational purposes has been presented in the work of Kirriemuir (2008) de Freitas (2008), and more recently by Gregory & Masters (2012), and a review on use of Second Life in primary, secondary and higher education (TOJDE, 2011). For example *SciLands* is a virtual environment within *Second Life* dedicated to science and technology. It has been used for testing standardised training modules for surgical students through series of lectures in a *Second Life* version of an operating theatre (http://secondhealth.wordpress.com/). Another example of digital world with educational value is *Croquet* that has been used for language teaching and arts related topics. It has been also used as an open forum for setting up and supporting a range of academic groups, such as astrophysics (Hut, 2008) where academics can meet up in virtual environments, exchange documents and share knowledge. Another example is

represented by the *VirtualPREX* project that uses classroom environment of Second Life for creating role-play for pre-service teachers in order to enhance teaching skills before teaching in real professional contexts (http://www.virtualprex.com).

Nevertheless, there are very few research studies regarding role-play methodology in virtual environments (Gao, 2011) and very few role-play environments are explicitly designed for simulation training and development. However it is possible to find online role-play games specifically designed for learning applications, where learning scenario and contents are developed and assessed by masters, tutors, trainers and psychologists. Suitable examples in this direction are represented by e-learning platforms such as *Eutopia*, *E-drama*, and *Unigame*. These are integrated systems of learning tool to be used by trainers, masters, teachers and learners to support the training experience. We will refer to this technology with the term of EMORPG, Educational Multiplayer Online Role Playing Games.

2.2.2 EMORPG

Our definition of EMORPG (Educational Multiplayer Online Role-Play Games) encompasses various aspects, as it refers to an experiential and imaginative activity inspired to the role-play principles, taking place in a virtual world were interpersonal dynamics occur because of people interacting at the same time (through artificial agents). This provides a structure ensuring transference of learning, where the simulation scenario is designed and implemented in line with identified learning objectives and group target needs.

Among the e-learning technologies based on the principles of role-play specifically designed for training, there are few examples of platforms based on avatars interacting in digital environments. Some are based on single players interacting with BOT controlled by a computer programme, such as *Atrisk* (Kognito, 2009) and *E-circus* (2006-2009). As they refer to systems engaging players in single user interactions they do not properly encompass principles of role-play, as process based on group interaction.

At-risk is an online role-play simulation game allowing people to build interpersonal skills and learn how to manage effective conversations in the area of behavioural health. It is designed to support university staff to recognise sign of psychological distress as depression, anxiety and thoughts of suicide in order to identify students that can be potentially at risk. Role-play engage users engage in 45 minutes conversation with an "expert" computer-controlled avatars that possess their own story and personality.

E-circus is a single virtual role-play animated by "synthetic characters" with the aim of establishing effective and empathic relations with learners. It has been created for the use of children and young adolescents in schools and to be used in combination with other educational methods. The simulations are designed in order to support students to deal with bullying and foster intercultural empathy.

Other platforms are specifically designed for delivering multiusers training experiences, where users can interact in digital environment and experience role-play techniques mediated by the PC and Internet.

An example of group role-play is represented by *Unigame*: Social Skills and Knowledge Training web platform. It was developed within the *Unigame* project financially supported by the EU Socrates/Minerva program in 2003-2004.

Unigame can be defined as an online multiplayers chat-based game to be used by tutors within university and life lifelong learner frameworks to support various areas of domains, as part of face-to-face learning activities (Dziabenko et al., 2003).

The final aim is to acquire knowledge within a specified topic area by interacting with other players and different team groups by using different means of communication, such as private or discussion forums, both text and voice chat video conferences.

Users are represented by avatars that take the form of a 2D image that users can select from a predetermined image gallery. Each avatar represents a role created and assigned by trainers. Feelings and moods associated to the chattext message can be conveyed by using a limited number of emoticons representing by facial expressions and punctuation marks.

The nature of the interactive experience itself can boost soft skills such problem-solving, effective communication, teamwork, as the overall aim of the game, regardless of the specific topic, is to reach mutual agreement within team members, as well as the other teams involved.

Within *Unigame* the interaction between groups of players is subjected to a competitive activity aiming to obtain the highest score within a specific subject defined by tutors. The group winner is represented by the group that has been able acquire consensus by the other teams in favour of their work, proposed future actions and plan to undertake in the game. Trainers also define time limits for planning decision, presenting team views and reaching consensus by other team players.

Each game can involve the participation of up to 44 players that can be divided in four groups. Each game is centred on a specific topic defined by the tutor that acts the role of a facilitator by moderating the emergent dynamics and assessing outcomes of exchanges and interactions between players. At the end of each game students are provided with feedback and debriefing on their performances and their specific contributions to the processe.

Unigame has often been used as part of a blended learning approach comprising of a number of sessions were players are introduced to topics to play and team to be part of; and involved in discussions around topics for reaching consensus or reflecting on the specific part played in the game.

E-adventure (http://e-adventure.e-ucm.es) is an educational authoring platform created with the aim of facilitating both the development of 2D pointand-click games and simulations for various purposes. An interesting feature of it is the direct involvement of educators in its development. The platform is the result of a project developed by the e-UCM e-learning research group at Universidad Complutense de Madrid, with the aim to promote the integration of simulations and games in traditional education processes and more specifically in Virtual Learning Environments (VLE). E-adventures provides educators with a user-friendly game editor that allows them to define characters, rules, contents, items, and scenarios of the game to be played both in first and third person.

Infiniteams (http://www.infiniteams.com), developed by TPLD, is a teambased multiplayer online game, can be defined as an example of online multiplayer task based activities rather than a role-play experience (e.g. cooperatively build up a bridge over a river), which integrate education with gameplay (Seeney & Routledge, 2011). It makes use of avatars to represent the players and the game scenario is based on deserted island survival elements. This software has been designed to be used for team building, management training, and recruitment in order to encourage team work, communication, leadership, trust, problem solving, and negotiation. The training activity is organised around course modules which are scored-time based depending on time taken to complete the game and strategy chosen by the team.

Each module (mini-game) is based upon 1 hour activities comprising of: debriefing to set up and discuss about the scenario to play; 2 round of plays intervalled by discussion and analysis of the team performance in the first game phase; conclusion and reflections facilitated by trainers. In education field TPLD has developed Eduteams multiplayer software for providing experiential learning to pupils aged between 10 and 14 year old. It is used to support the development of a variety of skills such as communication, team work, problem solving, as well as IT skills.

From the perspective of the EMORPG E-drama is probably one of the most renewed platforms that we will be describing more in deep in the following paragraph.

2.2.3 E-drama

Initially developed in 1999 by Hi8us, *E-drama* is a web-based role-play multiuser environment that incorporates a variety of tools for creating and customising role-play sessions. *E-drama* was developed within the LINK programme (People at the Centre of Communication and Information Technologies), involving the School of Computer Science, University of

Birmingham, as project coordinator and three other commercial partners: Hi8us Midlands Ltd (charitable company and SME in Birmingham); Maverick TV Ltd, and BT (SME in Birmingham). The overall aim of the project was to develop an online virtual role-play in order to investigate the nature of human metaphorical language able to convey affect by using the "ATT-Meta" framework; and develop an AI prototype able to detect and interpret emotional aspects of utterances, with a specific interest on metaphorical language.

The first version of the software (*edrama*) provides a 2D environment as interactive ground for both learners (actors) and trainers (directors), while the enhanced version introduces a 3D flash interface for scenario backgrounds and animated characters replacing the previous 2D static avatars.

Edrama offers a 2D online multi-user role-play environment developed by Hi8us Midlands Ltd supported by NESTA, Media 2 and BBC Online. It can be used for both educational or entertainment purposes, allowing people from different geographical locations and environments to interact simultaneously. With *edrama*, up to 5 users aged between 14–16, can interact to each other under the guidance of human facilitators than initiate the simulation, can change background of the scenarios, intervene in the role-play and communicate with players using text chat. The director gives semi-structured scenarios in order to promote users' improvisation.

The environment is provided with 2D avatars and a text-based chat interface and different backgrounds for setting up the scenarios. The transcript for every *edrama* session could be recorded and used in order to create films, plays or animations, as well as evidence of learning, and starting points for further learning activities. Users represented by avatars are able to personalise physical appearance of their own avatars such as dress and body characteristics, according to the scenario that they are invited to enact by trainers. The avatars could ensure anonymity of real users, as players interact to each other by using avatars' names.

The *edrama* software has been used in formal education for teaching aspects of drama, and also in various subject areas, such as creative writing and career advice with a version of the software called Dream Factory, commissioned by the UK University for Industry. The system was successfully piloted with Connexions Centres (a UK governmental agency that offer information, advice, guidance to young people aged 13 to 19 on topics including education, housing, health, relationships, drugs, and finance) and Skill City (a UK government sponsored event in Salford aiming to give young people a chance to learn a variety of new skills (hairdressers, bricklayers, builders, joiners, musicians, caterers, the Armed Forces, etc.). Thus, *edrama* was considered had the potential to be used a large variety of type of training.



Figure 2.1 Example of E-drama scenario

The enhanced version, referred as *E-drama* software, benefits of a number of additional features. The Figure 2.1 shows a scene from *E-drama*. It introduces a 3D flash interface for scenario backgrounds, as well as 3D emotionally responsive characters replacing the previous 2D avatar. Moreover an AI computer controlled agents can play minor roles and help monitoring the role-play simulation scenarios.

The AI actor detects the affective states from the text input of players, and at same time makes an emotional response according to the detected affective states and the specific role-played in the scenario. Whit this enhanced version researches challenged the possibility of integrating and using E-drama for different subject areas such for training involving social skills, personal development, as well as sciences and foreign languages. New three systems that will be described following have been integrated into the original version of the *edrama* software: 1) the *3D environment and avatars* and the two components creating the emotionally expressive avatars, such as the 2) *AI actor* and 3) *Demeanour*.

The creation of affective artificial agents and avatars has been inspired and based on different emotions modeling theories (Ortony, Clore and Collins, 1988; Prendinger and Ishizuka, 2001), conversional agent theories (Egges et al., 2003; Aylett et al., 2006; Cavazza et al., 2008), expressive virtual characters theories (e.g. Vinayagamoorthy et al., 2006), facial (Pelachaud and Poggi , 2002; Tanguy et al., 2003), and bodily expression (Chi et al., 2000; Hartmann et al., 2006).

E-drama software comprises of two user interfaces, "actor" and "director" client applications used respectively by users and directors. The director interface remains fundamentally unchanged with respect to the first 2D version that consists of many tools that allow monitoring the conversation, change background of scenarios, talk individually or to all the group players through the text chat. The significant 3D flash based development has mainly interested the actor client in order to support real-time representation of avatars' emotions and behaviours.

Flash is embedded into a Microsoft Windows application, containing 3D graphics components based on TARA, an engine for creating real-time 3D applications developed by BT. Tara is a flexible system allowing to easily integrate applications that are not known to the components of interface applications, as per the Demeanour framework component.

As previously introduced, each role-play can host the simultaneous interaction of a total of five participants that can customize their own avatars.

A virtual dressing room allow the customization of the avatars (gender, head, torso and legs), including details and characteristics of the role-play scenario (Figure 2.2); once the customization has been completed the 5 avatars

move to the multiplayer environments called "green room" where users can get initial contact and start to know each other.



Figure 2.2 Customisation of avatars in E-drama

Participants communicate to each other by test based chat messages that are shown in speech bubbles above avatars' heads. Similarly director and users can communicate to each other by typing in messages that are shown in speech bubbles above avatars' heads. A variety of non-verbal signals such as, facial expressions, gestures, and a range of body movements, can animate the 3D avatars, with the aim of making the interactions between players more engaging emotionally.

The director can intervene to assist the role-play by talking to users individually as well as to the group of participants: a 2D image overlapping the client window appears along with text in a dialogue bubble giving directions and feedback to participants (Figure 2.3).



Figure 2.3. Interaction between director and players in E-drama

Within *E-drama* the way each avatar is animated is determined by two main factors: the emotional profile assigned to the avatar according to the role to be played in the simulation, and the nature of users' text input during the interaction. This is possible without the direct intervention of participants thanks to the combination of two different technologies represented by the affect detection-open-ended improvisational text and the *Demeanour* system, one of the new features of *E-drama*. The control of avatars' animations is based on the Demeanour expressive animation framework (Gillies & Ballin, 2004) able to detect affective aspects of users textual speeches, such as emotions, moods, values, judgments, etc. (Dhaliwal et al., 2007). The system produces a set of affective animations stimulated by the quality of text messages and that can be associated to pre-defined character profiles endowed with a certain personality and emotional features.

The text input of users is analysed by a system called EMMA (EMotion, Metaphor and Affect). Once EMMA has detected the affect of the chat-text, produces an output representing a label of the identified emotion. This emotion-label is used in first instance by the AI agent to generate an appropriate response, and secondly by the emotional animation system that produces animations accordingly.

The enhanced version *E-drama* also introduces computerised AI guided agents in order to offer new elements to the scenario for developing participants' dynamics and especially to reduce burdens and responsibilities of real directors in the role-play process (Zhang et al., 2009). The AI actor is driven by a system called EMMA. The impact played by EMMA and the 3D animated characters on users' experiences were assessed in various trials in secondary schools that involved participants in dealing with scenarios regarding homophobic and school bullying and Crohn's disease.

The overall results of trials demonstrated that the introduction of the new features of 3D animated environment with AI characters improved the involvement of users in role-play activities who described the experience more engaging and realist, especially regarding the quality of social interaction between participants. The new E-drama version is considered having the potential of being integrated into school curricula for enhancing learning in social skills, personal development, languages and sciences (Zhang et al., 2009).

Another example of EMORPG is Eutopia. The next chapter will be specifically focused on Eutopia, as it has been applied to different contexts examples of which have been explored within SISINE, Proactive, Eutopia MT projects. It is still an active platform currently hosting role-play for Social Enterprise settings within the S-cube project (S-cube, http://www.s-cubeproject.eu), as will be described in chapters 5 and 6.

CHAPTER 3. Eutopia

Eutopia is focused on the advancement of the learning game concept, where the importance of role-play principles is embedded in simulated real-life situations. Specifically, it aims to provide an open source, flexible, and easily accessible platform for online training at low cost, in order to spread the applicability of role-play simulations through a larger population of potential group targets, where the online delivery of the training allows both geographic and resource barriers to training access to be overcome.

The key aspect of Eutopia is providing trainers (in role-play terms, the director) with a new and unique powerful tool for personalised feedback and debriefing purposes. Feedback and debriefing are regarded as the most important element for maximising learning process (Coppard and Godman, 1979; Gillispie 1973), as they guide trainees through a reflective process about their learning (Thatcher, 1990; Lederman, 1984), provide a space for giving personal meaning to the experience (Stadsklev 1980; Crobeil 1989; Petranek et al, 1992) and help to relate the experience to real life contexts (Spelvin, 1979).

As will be described in details in the following paragraphs, Eutopia offers a way for learners to practice and improve their ability to interact with others. Seen in this light there might be seen many possible areas of applications. In fact, in the last years the team responsible for Eutopia has started to explore different soft skills areas and context of applications in other projects, as will be illustrated in the final part of this chapter.

In essence, in whatever area Eutopia will be experimented, it could be considered as a valuable learning tool whether we adhere to the original philosophy that inspired the Eutopia project. Computer is seen as a tool where training and learning rely entirely on the human users of Eutopia communication system.

3.1 Psyco-pedagocical inspiring principles

The overall aim of Eutopia is to enhance the e-learning practice on soft skills development through a "learning by doing" approach. To this end, the training methodology is centred on a blended learning approach for soft skills training, which combines e-learning sessions based on online role-play games with traditional face-to-face delivery, as defined by Bonk and Graham (2012). This method is often used when personal contact is more critical, as in the case of soft skill training.

The current catchphrases in education are "learning by doing" and "constructionism". The use of role-play simulation games embeds principles and practice of experiential social learning, which allows people of building their knowledge in a collaborative interaction with others within virtual learning scenarios.

The crucial aspect of constructing meaning is related to activities that involve the twofold process of engaging mind and hands-on experience at the same time.

Within Eutopia the rational was to create immersive role-play simulation scenarios based on experiential and constructionist approaches that outline the use of the technology as an artefact for representing a model of the world allowing meaningful investigations of a certain topic.

Form this point of view learning is based on direct experience where both individual and social dimensions are promoted. This is thanks to the immersive scenarios in which learners can freely interact with each other. Indeed, Houle (1996) claims that it is the social dimension that is often the primary motivation for some types of learner. The role of the trainer in this environment is to provide guidance, challenge the understanding of learners and promote dialogue. Within this perspective trainers can employ Eutopia in order to offer a learning experience which develops from experience, through social interaction and is connected to variations in the environment (Dewey, 1966; Vygotsky, 1978); that support mental processes of assimilating new experiences into previous structures of thinking (Piaget, 1950; 1955); that can

exploit through making, by engaging conversations with artefacts that help to understand how ideas are formed and transformed (Papert, 1993). Learning, then, is a process of actively creating meaning from experience rather than simply acquiring it (Ertmer and Newby, 1993).

3.2 Eutopia: the platform

Eutopia is a 3D online platform for communication modelling based on Educational Multiplayer Online Role Playing Games (EMORPG). They have been already defined as a unique category of online game which allows players to interact simultaneously through Internet within the same virtual world according to identified relevant learning outcomes. Eutopia provides the basic functions of Multiplayer Online Role-Playing Games, however it also offers additional facilities which enable trainers and tutors to intervene during the game dynamics, record the training sessions for debriefing and feedback purposes (Miglino, 2012). An example of interaction between trainer and participants during the debriefing phase is shown in the Figure 3.1, as below.



Figure 3.1 . Interaction between trainer and participants in debriefing phase

An interesting feature of Eutopia is that trainers can create storyboards using the Eutopia Editor (Figure 3.2). This provides an authoring system that allows to non-technical people, such as trainers, to create learning simulation scenarios in a complex environment. In this way Eutopia addresses one of the difficulties typically related to the application of computational simulations for non- technical users (Gaffney et al., 2009).



Figure 3.2 Definition of a new storyboard

Trainers as per conventional role-play settings can assign roles to the participating learners.

Learners portray their roles interacting in a virtual, navigable environment provided by the system. The Eutopia virtual environment provides an avatarbased system of communication, mediated by artificial agents endowed with physical and emotional features, so called avatars (Figure 3.3) controlled by real users.



Figure 3.3 Definition of avatars' features

A wide range of user interface controls allows participants to complement their verbal messages (written text) with forms of para-verbal and non-verbal communications, such as tone, volume and rhythm of voice, facial expressions, and gestures (Figure 3.4).



Figure 3.4 User interface control panel

An embedded tutoring tool enables to record training sessions and replay role-play interactions, in order for tutors to provide feedback to participants, and for learners to reflect and analyse the dynamics occurred (Figure 3.5).

Recording			? 💌
Record file:			Browse
+	Ghapter _		Time _
Add chapter			
		Ш	
5	Start	Pause	Stop

Figure 3.5 Recording tool

The training methodology exploited by this technology enables a small learning community of participants to communicate, interact, and practice different styles of communication.

Eutopia is based on client/server architecture, which comprises of three different software:

- Editor - for trainers, allows designing of personalised storyboards and simulation learning scenarios.

- Client - for both trainees and trainers, allowing users to interact with the 3D environments and the other participants through text chat messages and non-verbal modalities;

- Viewer - for visualizing recorded group interactions and sessions along with text based exchanges.

The server manages the 3D engine, all the interactions between participants and trainers, and also enables the recording of the training sessions. In Eutopia environments are represented by specific settings (e.g. meeting room, office) in which defined training scenario becomes theatre of interactions between participants.

The role-play starts with a given script to be played in the training scenario decided by the tutors according to the learning objectives that require to be achieved.

With regard to the training needs each avatar is endowed with specific features regarding the non-verbal communication modality, such as facial expressions, gestures, and tone of voice.

3.2.1 Features of Eutopia

As introduced earlier, trainers can write the storyboards for the online roleplay, by defining roles, goals and physical and psychological features of avatars that participants will be playing. Trainers can intervene at any time during the role-play activity for soliciting an immediate reflection on the responsibility of the personal role-played within the dynamics occurred. The platform includes a system to record and replay role-play session interactions. In addition to debriefing purposes, this allows participants to observe the scene they have played from a detached perspective, and analyse the implication of personal actions, as well as emotional attitude on the final decision. They can send messages to players in order to facilitate reflections upon feelings, dynamics, and thoughts emerging from this interactive experience.

In addition to that, there are two other ways that can be used by trainers for intervening during the interaction among learners. The first refers to the possibility of taking on the role of one of the characters/learners in the simulation. The other is to act as an invisible stage director. With respect to this trainers can: a) observe the interactions among players; b) access the private characteristics of players; c) see private messages between players; d) broadcast messages visible to all players; e) exchange private messages with a specific learner; and f) activate specific events by changing the course of the simulation.

Learners that will be protagonists of the role-play once on the virtual stage can interact to each other by controlling their personal virtual alter egos. Once logged in, they join a 3D graphical environment in which they are represented by avatars that can be used to explore the environment.

Players can interact by using different channels of communication, such as texts based verbal messages (shown in speech bubbles above avatars' heads heads), para-verbal and non-verbal messages (expressed by emoticons and facial expressions that can be assumed by avatars). For example, players can check how loud a conversation might be (shown by the size of font displayed in the bubble) and what is the emotional tone used (shown by specific shapes and colours of the bubbles, Figure 3.6). Players can control gestures and body movements of avatars. They can also "whisper" messages to each other: these are messages that are audible only between players directly involved in the conversation and by the trainer. Finally, they can communicate with the trainer to ask for guidance or clarification.



Figure 3.6 Example of verbal and non-verbal messages connoted by aggressiveness

In order to deliver and implement an online training course on a specific theme through the Eutopia software, a trainer follows a series of steps detailed below:

1. create a storyboard using the Eutopia Editor specifying all possible information inherent the learning goals meant to achieve (objectives, characters involved in the story, physical and psychological features of avatars, events and messages to be introduced, and so on). According to the context or filed of application these storyboard can be quite prescriptive and focus on specific dynamics, or flexible in order to allow players' improvisation.

2. Upload the storyboard created on the Eutopia server in order to make it available to all potential users;

3. Assign roles and avatars for the specific role-playing session;

4. Start the role-playing session;

5. Join the role-playing session as a tutor through Eutopia Master.

The Eutopia Player allows managing all the activities in which the player will be involved:

1. Interaction with other users within group sessions (Roleplaying Session);

2. Free interaction with other users (Free Chat);

3. Software Testing (Demo Session).

These first two points are possible through the connection of the client with a server reachable via internet or by a local line.

An offline function it is also available in order to test and explore options, features an potentialities of the Eutopia Player.

As previously mentioned Eutopia appears as a 3D environment representing well-defined setting, according with the intended application of the tool. It could be a room, a building, a town, an office, and public space. The simulation environment includes sets of both graphics settings "library", and avatars "library".

Each avatar has its own features associated with a set of facial expressions and gestures. All avatars use the same categories of facial expressions and gestures, and way these appear depends on the features of the specific avatar played. The first step is to create a storyboard or script which defines the starting point for the learning simulation. All scripts stored into a database, are based on a standard structure: *name* (a brief definition which defines the activity), *description* of the general objective and outcomes, *description of the story*, *time* available for the completion of the session, *group goals* and *success criteria* (information about one or more goals that are common to all participants involved in the session).

Each script is underpinned by the general goal of the training process. Its effectiveness will depend on how far this goal will be achieved. Furthermore, each script, also describes the specific goals of each online session that are related to the general goal (Figure 3.7).



Figure 3.7 Definition of storyboard and learning objectives

Each avatar can be personalised and tailored to the learning goals of the scenarios according to the following options: features (sex, age, social status); physical aspects (e.g. dresses); role in the story; personal story; personality aspects (associated with specific non-verbal and para-verbal communication assets); individual goals.

According to the script chosen by the tutor for that specific session, each participant plays the role of one of the characters, associated with an avatar. Each participant is aware of the story in which the personal avatar is involved, common goals meant to achieve, specific goal assigned to his character, which is instead unknown to the other participants.

During the simulation, the trainer can introduce new elements in order to influence the course of interactions between players, such as element of difficulties that players need to overcome. All these additional events to the simulation, are part of the script known by the trainer, so he can be supported with respect the ways and the means of using these new elements. However the tutor is responsible of activating events, according to what he feels being the most appropriate moment for foreseeing a specific or a general goal. An event could be either a text which appears on the screen (letter, fax or document), or be represented by a new avatar who enters the scene and delivers a message, via text and with non and para-verbal elements.



Figure 3.8 Questionnaire window for participants

Eutopia also includes *an evaluation protocol* comprising of a set of questionnaires used to assess the level of learners' competencies before and after training has been undertaken (Figure 3.8).

A formative evaluation approach has been adopted for evaluating the Eutopia educational products. This method enable to assess the program during its development and assure that the developed software and training materials meet requirements on several aspects, such as usability, functionality, usability, efficiency, and training effectiveness.

Participants are asked to complete ad hoc questionnaires at different stages of the learning process:

1) Before commencing the training phase in order to gather both learners' expectation and initial level of soft skills competency.

2) After the completion of each training session so to obtain feedback from both learners and trainers about the value of the training experience: improvement of knowledge and skills, strengths and weaknesses of the software.

3) On completion of training phase to determine achievement of learning objectives. At this final stage trainers are asked to feedback on the significance of learning and potential transformative impact of the overall process.

3.3 The role of the trainer as learning facilitator

In Eutopia trainers play a fundamental role in facilitating the learning process, as well as in face-to-face traditional training settings. Trainers manage the interactions between participants, analyse and interpret group dynamics, shape the learning experience to assist specific needs, provide feedback on areas to be further developed, indicate possible directions for personal development. The use of educational software as a stand-alone tool, indeed, does not ensure that learning takes place at all. One of the recommendation for an improved use of simulations resides in its complementary rather than competition with other teaching and training methods (Druckman and Ebner, 2013). Moreover has been pointed out that trainers should dedicate more time for preparing users to the simulation. They should consider, for example, priming learners to focus on the relevant elements leading to the achievement of learning goals (Ebner and Kovach, 2010), and to familiarise with possible

emotional reactions before the simulation take place (Alexander and LeBaron, 2009).

The key of a successful training experience resides in the way trainers design, structure and facilitate the learning process. It has been argued that learning is facilitated when the trainers can participate responsibly in creating an empathic climate (Rogers, 1983). Moreover, without facilitation, guide and support an experiential learning can even lead to "mis-educative experiences" (Dewey, 1938). Indeed, experiential learning is about creating an experience where learning can be facilitated.

As previously highlighted Eutopia intended to create an environment taking the role-play techniques and apply them to a new training methodology MORPG based. Trainers through and within Eutopia assume potential different roles. They can act as playwright by writing storyboards; as screenwriter by personalizing training scenarios; as casting director by assigning roles to be played out; as a movie director by monitoring and guiding participants' actions and behaviours; as director of photography by selecting relevant dynamics to be recorded; as film criticism by giving actors personalized feedback (debriefing phase).

Trainers by creating storyboards can define the characteristic of training scenarios along with psychological and physical features of the different roles to be played by participants. They also act as guide for using the learning platform features at their best, in order to explore learning potential of available tools.

The use of feedback and debriefing systems allows the exploitation of all the potential of trainers' guide, facilitation and support. Trainers guide the learning process and may intervene as facilitators at any time during the simulation and on completion of the activities. Trainers can observe and analyse the evolution of the simulation, learner's actual performances, monitor improvements, progress and/or difficulties. They can send messages and comments to players for soliciting an immediate reflection on the responsibility of the personal role-played within the dynamics occurred. They can also activate events and conditions external to the simulations run by the users in order to change the dynamics of actual interactions. For example a second trainer can be involved in the interaction playing the role of one of the characters as can happen in real face-to-face role-play activities.

Trainers can record the training sessions for debriefing and feedback purposes in order to favour communication process, encourage mutual sharing, self-reflection, self-discovery, and help in identifying potential areas of personal development. The recording tool helps trainers to support participants to observe the dynamics they have played from a detached perspective, and analyse the implication of personal actions, and emotional attitude on the final decision. The value of video recording simulations has been stressed by Ebner and Kovach (2010), as tool that can help participants in a more accurate reflection on dynamics occurred, than within feedback and debriefing processes.

At the end of each session they solicit and provide feedback to participants, promote input for group discussion, by analysing players' dominant strategy of playing, behavioural patterns adopted, emotional reactions and communication and relational dynamics activated. On completion of training phase they also act as assessors by verifying and ensuring achievement of individual and collective learning objectives.

As it has been pointed out in literature, the role of trainer is crucial through the entire process of the role-play: the definition of the learning scenarioenvironment, the monitoring of the role-play, its course and dynamics; and the assistance offered with feedback and debriefing in order to maximize learning (Dawson, 1990; Thatcher, 1990; Perry and Euler 1988; Glandon, 1978; Shirts, 1976). Livingston (1970) highlighted how can be influential the role of trainer, by describing a study in which were found significant differences in attitude change between groups of learner who played the same simulation under the guidance of different trainers.

3.4 Eutopia example of application settings

The Eutopia platform can acknowledge many years of experience underpinning several European projects, such as Sisine, Sinapsi, Eutopia-Mt,
Proactive, and more recently the S-cube project. Eutopia has been used and tested in different contexts and by different group targets (University, Training institutions and agencies, MEs and SMEs, Public Administration, as well as Non-governmental organizations and Social Enterprises) and for the development of various kinds of competencies (negotiation, international mediation, negotiation, communication, leadership, team building, time management, motivation, decision making and problem solving). In the following paragraphs the several applications of the Eutopia platform mentioned above will describe more in details.

3.4.1 SISINE

SISINE represents the embryonic version of the Eutopia platform that was developed within the Lifelong Learning Leonardo Programme Framework (LLP) in 2007, with the primary objective of conducting online role-play on negotiation (http://www.nac.unina.it/sisine/).

Online role-play scenarios were created in order to practice and apply negotiation skills in different contexts within the three party countries involved in the project. In Poland the scenarios were built around commercial negotiation issues, in Slovakia the simulations reproduced conflicting situations in human resources management in relation with trade union issues, while in Italy role-play were specifically focused on intercultural negotiation. In this early version players could benefit from two different interactive systems: multi player (as for Eutopia) and single player environments, that will be described following (Miglino, 2007; Miglino et al., 2007).

The last system allowed learners to practice negotiation strategies through an offline exercise-game (so-called "gyms") by interacting with a computercontrolled avatar (BOT). The latest version of Eutopia aims, indeed, to create interactive situations that could reproduce more realistically what happens in face to face role-play situations, hence it challenges of accurately transferring and representing the role-play methodology and principles.

As it has been described, the Eutopia platform accords more weight/importance to the role of trainers, educators, psychologists in the

interaction with players, in preparing, supporting and guiding to the role-play performance, as it happens in traditional role-play settings.

A further application of the Sisine platform have seen its application in the field of soft skills development such as negotiation, leadership, team building, time management, motivation, decision making and problem solving, within the Sinapsi project funded by LLP in 2009 (http://www.nac.unina.it/sinapsi/). Online role-play scenarios have been created in order to allow participants to master new skills that that could complement professional and job specific related training, more specifically involving the following group targets: university students in Italy, employees of public administration agencies in Slovakia, and people working in small and medium enterprises in France.

Compared to the early applications, the latest version of Eutopia also offers 3D environments graphically improved, enhanced communication tools (for text and behavioural-relational interactions), including feedback and debriefing systems, and the embedding of an evaluation protocol for users competencies assessment and software evaluation.

As specified before, the SISINE software in addition to the multiplayers provides with a single- player editor that allows trainers to define offline roleplaying games for individual users that will be played in single modality, before the online group simulation session.

Learners in offline modality by interacting with artificial BOTs controlled by an Artificial Intelligence software, are involved in the gyms, learning environment games. The term gym recall the idea of both a not threatening physical and psychological space were users can exercise their skills before the training performance along with other real players.

The scripts are endowed with a high degree of details and the interactions with the BOT are quite restricted by the learning needs identified by the trainer.

In addition to the description of the scenario and roles to be enacted, players are supported with specific sets of phrases and exchanges to be used to interact and communicate with the BOT, along with non-verbal and para-verbal messages. More specifically the definition of each gym involves the following three phases: 1) General description of the story; 2) Definition of the "actor" (name, description, personal objectives, features of the avatar); 3) Definition of the communication-dialog (Figure 3.9), such as number of communicational steps, set of possible response-sentences available to the player, emotional content of the sentences along with non and para-verbal signals, possible effect of those messages on real players. For example if the avatar (real player) selects the following sentence: "Shut up and listen to me!" this message has a strong emotional content which is likely to increase aggression and resentment in the BOT actor. Similarly to the human player, the BOTs can choose between a set of different sentences and related emotional messages. Players can interact with different BOT, each with its own personality ranging from aggressive, passive and assertive, as defined by the teacher according to the specific learning objectives. Players can use the gym for their skill exercises without the presence of trainer is required. Later on they can watch recordings of the exercises, and obtain feedback with comments and suggestions.



Figure 3.9. Definition of a dialog using the Single Player Game editor

3.4.2 Eutopia MT

The use of the Eutopia platform has been adopted within the EU, TOI Leonardo Project Eutopia MT (where MT stays for Mediation Tool) in 2008. The overall aim was to promote the development and acquisition of mediation competencies for the multitude of people dealing with conflict resolution and integration of differences (trainers, teachers, politicians, lawyers, local administrators, intercultural mediators, social affair officers, police forces, peace workers, etc.). Role-play learning scenarios have been designed in order to facilitate the enhancement of mediation skills in the areas of vocational training and educational psychology (Miglino et al., 2010). The group of participants was composed of experienced professional in mediation and negotiation, as well as trainers, academics, students with different grade of interest and involvement in mediation topics.

More specifically during the project were organised three learning experiences across the project partner region. The online role-play scenarios that were developed in order to explore three different conflict contexts: 1) an urban immigration social conflict (Naples, Italy), 2) an ethno-political conflict (Belfast, Ireland); 3) and an international conflict acting as urban issues affecting the city area (Nicosia, Cyprus).

The training was delivered through a blended methodology involving participants into a series of activities, which were as follows:

1) Initial face-to-face meeting for sharing learning objectives and familiarising with the technology.

2) Three online training sessions followed by debriefing and evaluation sessions.

3) Final face-to-face meeting to reflect on the experience and assess impact of training.

An experienced trainer facilitated all the above activities, providing feedback on feelings experienced and behaviours displayed and evaluating progresses toward relevant learning objectives. Eutopia MT conducted two rounds of user trials in North Ireland, Cyrus and Naples, for testing the learning effectiveness of both the simulation scenarios and the overall training process.

As mention earlier, the overall intervention was assessed in three different conflict contexts collocated in Naples, Belfast and Nicosia. A total number of 35 people across the three countries between 25 and 45 years of age participated in the two trail phases.

The group of participants was composed of experienced professional in mediation and negotiation, and trainers, academics, students interested and involved in different ways to the themes of mediation and negotiation

The training need analysis process was envisaged to identify the nature of the mediation skill needs across the beneficiaries of the three countries in order to create tailored training scenarios.

The development of the training phase involved the same sequences of steps for all the participants of the three sites and for both trials.

All groups of participants were involved in the same activities which were as follows:

1) A face to face meeting for sharing learning objectives and familiarising with the technology. As part of the first activity the people in Cyprus also completed a workshop covering negation and mediation approaches as they are not familiar with these topics.

2) Three online training sessions followed by debriefing and evaluations sessions

3) Final face to face meeting to reflect on the experience, assess impact of training and gather information for future development.

Target group reports confirmed that a well-established tradition in mediation practice in North Ireland was supported by a large number of organization and agencies devoted to the mediation cause at different levels. By contrast, in Cyprus and Naples were reported isolated initiatives related to conflict resolution issues, mostly regarding university courses and training programmes. This finding had also an impact on the recruitment process. It was more difficult than expected and the drop-out rate was higher, leading to smaller and different sample sizes than anticipated in the proposal. In short, due to organisational and social difficulties was not all easy to reach the intended beneficiaries. In Cyprus, the local organizers decided that it was not possible to deliver a trial that focussed directly on their inter-community conflict. They opted to focus the training scenario on an environmental conflict, only indirectly linked to the intercommunity issues. In Naples, attempts to work directly with conflicting immigrant and indigenous communities were unfruitful, forcing the organizers to recruit participants among trainers and educators with no direct link to the conflict. Only in Northern Ireland the communities originally targeted was reached and involved in the trial. The explanation can be found in the long story and tradition of practice in mediation. In addition the active engagement of the population in these themes, acted as a bridge in term of securing participants support.

Essentially, was found that the needs that it is possible to meet with technology and methodology proposed by Eutopia are mainly related to the effective impact in building and enhancing relational skills, with a specific focus on mediation and negotiation.

The Eutopia authoring system was a technical success. As already highlighted it allows the design of potentially infinite training scenarios for role-playing exercises according to the learning needs and personal experience of the final users.

The results demonstrated the tools and methodology developed have a strong learning potential. The experience of Eutopia MT confirmed the value of using role-play simulations gales as tool that can help trainers to reach dispersed learners and improve their learning, and not as an artificial replacement for a trainer. Eutopia placed the design of learning exercises firmly in the hands of trainers, while the dynamics emerged in the game played depend on learners. This strategy allows teacher to develop personalised scenarios for a specific target population, with specific learning needs, and participant to experience a rich, more open and realistic learning experience than they would had if forced to interact with a computer controlled players system. Learners and tutors reports (questionnaires, interviews and debriefing sessions) from all three sites evidenced interesting findings. One advantage was that Eutopia MT attenuated the physical distances and divisions between communities in conflict. Learners from Cyprus and North Ireland world not normally crossed into the area controlled by the other communities. With Eutopia this was not required as "real" people could "realistically" interact to each other, even if through "artificial" alter-ego, within a "virtual" environment. Participants described the overall training experience through RPSG as emotionally engaging (40%), as an opportunity to improve communication skills (80%), and as a flexible tool than can elicit learning even in contexts different from mediation (90%).

Although in the Eutopia MT experience all three trials sites used the same technology, methodology and learning approach, we can affirm that the main factor that underlines the different impact of the programme is related to historical, political and social reasons. While in North Ireland, mediation is a task for government and NGO organisations and it is widely perceived as the essential prerequisite for the process of peace, in Cyprus and Naples the mediation is a process less established. Has already mentioned, it was difficult to reach the intended beneficiaries of the Eutopia MT project. This reminds and remarks how critical is the stage of designing the training to the success of the learning program, in accurately targeting the perception of needs and willingness to participate to the programme on offer of final beneficiaries.

Some of the difficulties encountered during the project were related to technical or usability issues, however there were not sever. In all three test sites, many users were unable to use the extensive capabilities of paraverbal and non-verbal communication offered by Eutopia. User reports suggested that these functions were difficult to use simultaneously with verbal text mode messages. Moreover they were considered as distracting from interactions with other users. In some cases, filters installed by internet providers prevented the software from communicating to the central system. Limited keyboard skills precluded many users from fully exploiting the potential of the system. Last but not least, users sometimes found difficult to interact to each other using a language different from their natives. The different levels of English knowledge prevented the use of richness of language expressions and vocabulary, even crucial when relational dimensions are exploited. This is the reason why in the future applications of Eutopia (e.g. Proactive and S-cube) in order to overcome the issue aroused, learning contents and evaluation tools have been developed in the languages of different countries or parties involved in the experiences.

3.4.3 Proactive

Within the LLP, KA3 Proactive Project (2010-2011), Eutopia was employed for supporting teachers and trainers in the design and delivery of online role-play scenarios tailored to primary, high educational and vocational learning contexts. Along with Eutopia, the E-adventure editor game (see chapter 2) was used for the design of training games addressing pupils of primary as well as student of high education sectors.

The overall aim of Proactive was to create a learning contest for supporting teachers belonging to different learning sectors to the use of educational games, the design of learning scenarios tailored on needs and learning styles of trainees in order to encourages their implementation in traditional educational practice. Within co-design workshops teachers and trainers from 23 educational institutions were engaged in the design of different game and role-play learning scenarios dealing with a wide range of subject matters across the three different learning sectors, such as medical education, history, physics, negotiation skills, forensic skills and ICT. As outcome teachers and trainers of the four countries involved in the project (Italy, Romania, Spain and U.K.) designed among 60 games and learning scenarios that were tested in real educational settings.

Specifically, Eutopia was used for creating a variety of scenarios focused around collective negotiation, mobbing, sales and advertising skills, employee selection, group dynamics, doctor-patient relationships, communication. More specifcally, Proactive aimed at fostering teachers' and trainers' creativity through the design of educational games based on the five metaphors of learning as identified by Simons: acquisition, participation, discovery, imitation and experimentation. The five metaphors of learning model (Simons, 2003; 2004; 2008) represent a description of different and individual ways of learning, underpinned by learning theories. It can be considered as a comprehensive model which is expression of the combination of some learning models with the theories of change by De Caluwé and Vermaak (1999). The result is a classification of ways of learning into five groups (metaphors) each representing a preferential learning style. However, each individual preferential learning's style is also expression of all the other metaphors according to personal aptitudes, context in which learning takes place, and the content to be learnt (Simons and Ruijters, 2004).

A brief description of the five metaphors of learning is outlined below:

- Imitation. Learners who prefer Imitation learn best in a hectic, relatively unpredictable and constantly changing work environment. They look for situations and people that will teach them something, by example and observation. They are very interested in anecdotes concerning best practice and what works. They prefer to learn in the real world (instead of situations involving role-play and exercises).

- Participation. People who prefer Participation learn by interacting and communicating. Interaction and learning within a group is essential for them both for being understood and for understand other's ideas. Win-win situations all around.

- Acquisition. Although many trainers and teachers are trying to find ways to bring theory and practice closer together and to escape the restraints of the people who prefer the classical system learning. They feel that can learn well when goals are set and learning processes are defined. They like to be taught by "experts", teachers who know their subject. Regular testing is part of this learning process, as it can give indications to what extent the results have been achieved.

- Experimentation. It seeks to bring learning closer to the workplace, choosing forms like hands-on training and role-play. The core of this approach

is that learning is a "learning situation". Learning in as Experimentation requires a safe, not too complex, but realistic environment where learners can experiment, ask questions and have the opportunity to reflect. Learning can be supervised by experienced trainers that can guide, simplify or clarify situations, and support towards the achievement of individual goals.

- Discovery. Learning as Discovery is based on the premise that life and learning are synonymous, as we are in a continue process of learning. This metaphor is closely related to the "learning by doing" constructivist approach. In this perspective learning means finding personal ways through, and understanding situations. Learners that prefer Discovery searches for inspiration and meaning and finds these their environments, in relation to friends and the people around and close to them. Knowledge is what can be constructed. Discovering learners require inspirational supervisors that are able support them through their creative path of learning.

In essence, the overall objective of Proactive aimed to implement an approach for designing educational games with the support of the five metaphors applied in natural learning, in order to create learning environments tailored as much as possible to each individual user's needs.

3.4.4 S-cube

The S-cube project represents the most recent application of the Eutopia platform that have being used for designing role-play scenarios for promoting soft skills development of individuals working and supporting Social Enterprises (http://www.s-cubeproject.eu/index.html). The consortium comprise of four European partner countries: United Kingdom, Italy, Ireland and Germany. Funding for this project has been received from the Leonardo da Vinci Programme 2011, within the Transfer of Innovation action. At his stage, the design of role-play scenarios is still in progress. Preliminary results gained from the training need analysis will be described in detail in chapter 6. Essentially, they indicate that Communication and Effective leadership followed by Decision Making, Strategic Thinking, Conflict Resolution and Judgment are ranked highest in terms of importance for Social Enterprises.

Likely role-play learning scenarios will be designed in order to practice communicational skills as transversal competency across the other related relational dimensions. In addition to the 3D environment the Eutopia client allows users to interact to each other in 2D settings, as this can be an easy communication system before and after the 3D simulation take place. Feedback and debriefing process are supported with an additional feature represented by Bookmarks. These allow trainers to mark and record relevant dynamics or events that are retrieved later for reflection and discussion with individual learners or group members. The case study of the S-cube project regarding finding of the TNA phase for designing and implementing simulation scenarios tailored to the relevant soft skills for SE actors will be described in detail in chapter 5 and 6.

CHAPTER 4. A study on trainers perspective on role-play practice in virtual environments

As it has been pointed out throughout previous chapters, trainers using both online and traditional role-plays in their professionals practice play a key role in establishing, supporting, and maintaining the effectiveness of the overall learning process.

This chapter reports experiences of professionals (psychologists, trainers and pedagogists) that have implemented online role-play into training practice in order to encourage active experiential learning, and explores some of relevant findings emerged. In general terms, we can state that, besides the different settings and applications, role-play techniques can be successfully migrated from traditional settings to novel, digital platforms and environments.

In particular, through professionals' experiences, our interest has been focused on investigating and exploring which characteristics make online roleplay activities a meaningful learning, training and developmental method.

4.1 Questionnaire design and distribution

In order to explore the perception of experienced professionals on the adoption of educational online role-plays in educational and training contest, an online survey comprising of 29 questions has been created. The survey was generated by using Qualtrics and deployed online, as this could allow flexibility in completing the questions at users' time convenience.

We refer to the general term of trainer for indicating the different professional categories targeted in this study, that are, educators, trainers, psychologists and pedagogists that have used in their work online role-play activities. We have asked trainers to share their experience about the use of educational online role-play, based on e-learning digital platforms and applied in various contexts and for different purposes, such as, psychodrama, sociodrama, simulation training settings.

The 29 questions are preceded by demographic information, in order to collect: (1) gender and age; (2) professional roles; (3) delivery method adopted

in using the technology; (4) total number and length of role-play sessions; (5) number and age of participants involved in training sessions; (6) context of online role-play application; (7) Country in which the technology was used.

In order to better assess and analyse the overall quality of the perceived elearning experiences of the trainers, the questionnaire comprehends different kinds of questions. In particular, the 29 questions comprises of 22 statement questions based on a five-point Likert scale ranging from "Strongly disagree" to "Strongly agree". In addition, 5 multiple answer questions with text space for recording personal observations, and 2 open questions complete the questionnaire.

Based on trainers' experience, the questions aim to investigate how online role-play can favour and foster meaningful learning experiences to participants with respect to the different following dimensions:

- Common characteristics and main differences between traditional and digital role-plays;
- Value of specific features and tools of online role-play;
- Specific learning mechanisms/means not occurring in face-to-face experiences;
- Role played by mechanisms of feedback and debriefing in online settings;
- Type of skills targeted with online role-play activities;
- Level of involvement, engagement and comfort experienced;
- Limitations and strengths of using online role-play in professional practice.

4.2 Participants

The professionals involved in this study had experience of using the Eutopia platform for designing and delivering online role-plays in their contexts of practice. As we have illustrated in the previous chapter the Eutopia platform has been consistently used for many years, since 2008, within several European projects.

The participants in the study (n=15) are experienced professionals (psychologists, trainers and pedagogists) adopting role-plays activities in traditional settings. Our aim is to investigate how they perceived the use of online role-play as tool for training and learning purposes. An invitation to participate to the survey was emailed to 18 experienced professionals who had previously adopted Eutopia, and 15 of them have replied and took part to the study.

Among participants there was an almost uniform distribution of the 15 male and female respondents, representing respectively the 47% and 53%.

Out of the 15 completed surveys, the principal cohort of respondents is represented by psychologists (11), followed by 2 pedagogists, and 2 trainers with different background (Figure 4.1).



Figure 4.1 Professional role of respondents

The 73% of experienced professionals in traditional role-play activities had also experience of blended learning methodology (i.e. face-to-face and online sessions), while 27% used online role-play as stand-alone. The 50% of professionals were involved in up to 10 online training sessions, 29% up to 20, 7% up to 30 and the 14% attended more than 30 online sessions. The average number of participants per session was 5, belonging to a group age ranging between: 18-30 (32%), 30-40 (40%), 40-50 (20%) and over 50 (8%).

In terms of duration, the majority of the sessions (71%) had an overall length comprised between 30 and 45 minutes, while longer sessions (up to 2 hours) were reported by the 29% of respondent.

With regard to the context of application of online role-play, results illustrate that there is diversification in at least 5 different areas. There is a clear indication that within the University the use of online role-plays is well established (45%). This tool has been also used in Non Governative Organisations (25%); Medium and Small Enterprises (15%), Public Administrations (10%), Training company (5%). Those data suggest the potential advantages of using an accessible and flexible learning tool for organizations that do not normally have access to sophisticated training systems for many contingent reasons, such as economics, time involvement, space, logistics and resources issues.

Interestingly, online role-plays have been used by respondents across different EU countries, although the highest applications are registered in Italy (61%): United Kingdom (13%), Germany (4.35%), France (4.35%), Spain (4.35%), Cyprus (4.35%), Ireland (4.35%) and Slovakia (4.35%).

4.3 Results

Overall, the trainers unanimously accept online role-play accepted as being a learning experience enabling participants to be engaged on the three interdependent levels identified in the survey (cognitive, affective and emotional) as it is indicated by the 93% of respondents (Figure 4.2).



Figure 4.2 Three levels of engagement enabled by role-play

With regard to the methodological effectiveness of using digital platforms, online role-play is considered by professionals as a valuable methods to be employed for supporting participants to develop and master skills and competencies needs, as showed by the 66% of professional agreeing on its effectiveness (53%A, 13%SA, average 3.73) compared to the very low grade of disagreement (7%) and to 27% of professionals that did not expressed a specific position (Figure 4.3).



Figure 4.3 Effectiveness of online role-play in boosting competencies

Online role-play is recognised as having the same effectiveness of face-toface experiences by the 72% of respondents (Figure 4.4).



Figure 4.4 Same effectiveness of face-to-face and online role-play

About the statement regarding the online role-play simulations as tools making learning more meaningful to participants than face to face role-play activities (Figure 4.5) even if we register a general agreement (average 3.13), there is not a remarkable position: 40% of professionals expressed their agreement (33% A; 7% SA), 20% (13% SD; 7% D) disagreement, and 40% did not know.



Figure 4.5 Meaningfulness of online versus face-to-face role-play

Similarly (Figure 4.6), it has been registered a general agreement (67%; average 3.5), even if not a strong position, on the statement regarding that online role-play enable trainers to apply typical principles and techniques of face to face role-play (e.g. meta-role "as if"; role-reversal; double; mirroring; auxiliary ego). 7% strongly disagreed; 27% NAOD.



Figure 4.6 Transferability of principles of traditional role-play in online settings

However online and traditional role-plays are considered having the same level of methodological effectiveness as they can be employed for the achievement of similar learning goals. Indeed with respect to that it has been registered general consensus by 93% (73% A; 20% SA; average 4.13) of professionals (Figure 4.7).



Figure 4.7 Learning effectiveness of online and face-to-face role-plays

There is no specific indication on whether the involvement in online roleplay improves and facilitates interpersonal relationships between trainers and trainees, as per face to face activities.

The 40% professionals agreed on the fact that the involvement in online role-play boosts interpersonal relationships between trainers and trainees as face to face activities; the 34% of disagreement (7% D, 27% SD) remarks instead that traditional activities constitute a desirable setting for enhancing those relationships. The remaining 27% did not take any specific position, average 3 (Figure 4.8).



Figure 4.8 Boosting relationships within people in online and face-to-face role-plays

Among the advantages of using online role-plays (Figure 4.9) the highest frequent response is associated to the anonymity of players that, acting through avatars, encourages self-disclosure (a); this is followed by responses in the same direction, highlighting the idea that the benefit of acting through avatars seems also to allow a more affective detachment (c), and enhance participants' comfort (b), though not affecting the identification with the enacted role (d). Online learning seems not being perceived more meaningful than face to face role-paly activities as it based on direct experience (e).

Q21. I think that the use online role-play highlights additional strengths and advantages of role-play methodology that might not be occurring in face-to-face activities (you can tick ALL options that apply to you):

Answer

a) Anonymity encourages self-disclosure

b) Playing through avatars enhances participants' comfort, engagement and involvement

c) Acting through avatars allows affective detachment and help to master emotions and elaborate dynamics

d) A twofold identification process seems to occur, as the physical appearance of the avatars users act through reinforce the identification with emotional features to play out

e) Learning is perceived more meaningful as it based on direct experience (of "doing practically something")

h) Other: free text



Figure 4.9 Peculiar advantages of using online role-play

This is evidenced by the 73% of professionals who agrees with the idea that acting through avatars encourages participants' self-disclosure (Figure 4.10)



Figure 4.10 Intermediation of avatars encouraging self-disclosure

The key differences between online and face to face role-play games are mainly associated with limitations of using digital platforms (Figure 4.11), as evidenced by the highest response rate associated to a decrease of role and emotional engagement (b), and the possibility to communicate effectively (c), especially if compared with lowest rate assigned to the preferences going in opposite direction (b and d).

Q20. I believe that there are key differences between online and face to face role-play activities, such as (you can tick ALL options that apply to you):						
Answer						
a) Decrease of role and emotional engagement in online role-play						
b) Increase of role and emotional engagement in online role-play						
c) Decrease effectiveness of communication in online role-play						
d) Increase effectiveness of exchange and interactions between participants in online role-play						
e) Focus on cognitive aspects and less on relational dimensions in online role-play						
f) Focus more on individual than team objectives in online role-play						
g) Learning is perceived less meaningful in online role-play						
h) other: free text						
Q20. Key differences between online & facto-to-face role-play						
a					9	
b	1					
c				7		
d	0					
u	0					
e				7		
f			5			
g		3				
	0	2	4 (6	8	10

Figure 4.11 Key differences between online and face-to-face role-play

Although reactions, emotions, and feelings experienced through online roleplay are recognised as authentic and realistic (Figure 4.12) the amount and degree of emotional engagement seems not to be at the same level as per face to face activities.



Figure 4.12 Key differences between online and face-to- face role-plays

Among the differences characterising the two methodologies, professionals also think that in online role-plays the learning process is more focussed on cognitive objectives (e), then relational dimensions and team objectives (f), while only few consider the learning process as less meaningful than in traditional role-play activities (Figure 4.11).

The effectiveness of simulation role-plays (Figure 4.13) is considered compromised for the majority of the respondents by the difficulty of managing interactions between participants (d). Lack of role and emotional engagement (a), inadequacy of communication and interactions between participants (b and c), and difficulty of keeping attention and interest on learning objectives (f) are recognised at the same level of importance in affecting the online training process. Emerges again that learning is considered a meaningful process occurring in both online and face-to-face role-play.



Figure 4.13 Differences in learning effectiveness between online and traditional roleplays

Moreover, with regard to the statement asking to share experiences of weakness and difficulties of using online role-play (Figure 4.14), the majority of respondents agrees on the lack of preparation to the use of the tools (b).





As stated in question 25 (Figure 4.15), when asked what would make online role-play more effective (Figure 4.15) the aspect more frequently selected regarded the provision of additional sessions for facilitating users to familiarise with the virtual tools is seems to be the most relevant (c). This was followed by the suggestion of providing more customised dedicated sessions to support professionals on how to use the methodology (b); of increasing number of online sessions during the training programme (e); raising the awareness of the use of MORPG/technology in supporting learning processes seems not to be considered as particularly determinant factor. Less importance was attributed to the length of training sessions (f) and number of face-to-face sessions during the training process to support the objectives and content of the training (d).



Figure 4.15 Aspects would make online role-play more valuable

A great percentage of respondents (85%) would recommend the use of roleplay educational simulation into training practice and/or for learning purposes (Figure 4.16). The remaining 15% correspond to the neutral position of Neither Agree nor Disagree.



Figure 4.16 Learning support of online role-play to traditional practice

With regard to the possibility of implementing online role-play into the traditional training practice and or for learning purposes (Figure 4.17), 43%

(36%A; 29%SA) believes its feasibility, while 28% of respondents (21%D; 7%SD) considers it difficult.



Figure 4.17 Feasibility of implementing online role-play into traditional practice

Indeed, 73% (33%A; 40%SA) agrees that a blended methodology with the combination of online role-play activities and face to face meeting is suitable for skills and competencies training and/or development (Figure 4.18), while 13% expresses disagreement. 64% of professionals that adopted the blended methodology agreed on the statement of the above question, while 18% disagreed.



Figure 4.18 Suitability of blended methodology for skills and competencies training

The importance of using tools for creating scripts and learning scenarios tailored on specific learners' needs is considered crucial by 100% of professionals involved (Figure 4.19).



Figure 4.19 Definition of tailored scenarios boosting engagement of learners

The possibility of intervening while the simulation is in progress for revising script and roles to play can help trainers (Figure 4.20) to focus and analyse important emergent dynamics (93%) and can also (Figure 4.21)

enhance flexibility and self-discovery in trainees as they can experience different ways to act and behave (83%).



Figure 4.20 Revision of scripts and roles for focussing on critical dynamics



Figure 4.21 Real-time suggestions of trainer boosting empathy and flexibility

93% of professionals agree that an accurate definition of scenarios, and assignment of roles and avatars' feature to specific payers, helps to be more focused on aspects and dimensions that learners need to develop (Figure 4.22).



Figure 4.22 Definition of scenarios and roles for focussing on specific dimensions

The possibility of using both verbal and body language is considered crucial for making effective interactions between participants (87%; Figure 4.23) and allows experience of different styles of communication and understanding of the complexity of a message (87%; Figure 4.24).



Figure 4.23 Use of verbal and non-verbal messages as key aspect for effective interactions



Figure 4.24 Use of verbal and non-verbal messages for experiencing different means of communication

Online role-plays enabling feedback and debriefing processes are considered crucial for creating valuable learning by 87% of respondents (Figure 4.25).



Figure 4.25 Feedback process as means of valuable learning

The possibility of intervening at any time during the simulation for feedback purposes is considered helpful by 74 % of professionals because trainees are given the opportunity to reflect in real-time upon emerging feelings, dynamics, and behaviours (Figure 4.26).



Figure 4.26 Constructive feedbacks during simulations helps emergence of personal feelings

This real-time intervention is moreover considered helpful by 67% as it is an occasion for exploring new points of view that can support for further actions and decision making (Figure 4.27).



Figure 4.27 Real-time interventions for supporting new perspectives and decision making

The possibility offered by online role-play to analyse story dynamics occurred after the simulation is concluded in drawing evidence of participants' development and progress is considered fundamental by 87% of professionals (Figure 4.28).



Figure 4.28 Importance of analysing story dynamics occurred as evidence of development and progress

4.4 General remarks

Based on the questionnaire results it is possible to outline some general information that can help to shed lights on the role of online methods in training, especially in relation to soft skills.

First of all, it must be noted that, in our survey, the overall number of sessions facilitated, their length, and the number of trainees did not affect significantly the evaluation of the trainers' experience of online role-plays, as we could not find any significant relation between those variables and the relevant questions within the survey.

With respect to the learning experiences perceived by trainers, interestingly, the quality and dimension of psychological mechanisms and means that make a meaningful learning experience for participants in online role-plays is assessed as not being different from those occurring during face-to-face activities, that is, guidance, feedback, debriefing and attention on learners' needs.

However, online role-play learning process is not perceived as being more meaningful than face-to-face, especially when the meaning mainly relies on the involvement generated by "doing something" practically.

In general, therefore, with regard to the methodological effectiveness of online role-play, we can affirm that it is generally considered as effective as, but not better than, traditional face-to-face experience. Similarly, feedback and debriefing processes and guidance of trainers are consistently recognised being as crucial as per face-to-face activities. This fact seems to highlight how the specific value of online simulation techniques mostly depend on the use that professionals make of them, in particular, in combination with other supporting activities to learning process, and not simply by the use of the online platform as a stand-alone tool.

As Shirts (1976) has pointed out attitudes of trainer toward simulation, as well as knowledge and skill in administering the game, can affect the experiences of learners within the simulation.

When looking at the specific features of online role-play simulations that make them suitable, or at least different, from traditional settings the most important element seems to rely on the safety net of anonymity, as already noted in other studies (Bond, 2002).

Studies exploring learning experiences in online (not virtual) environments show that both role engagement and anonymity are important elements that can impact the success of a role-play. Anonymity can help to overcome gender and cultural issues and stereotypes, heighten students' engagement with learning objectives, facilitate confidence and disclosure (Chester and Gwynne, 1998; Sullivan, 2002; Freeman and Capper, 1999), to reduce interpersonal barriers (Connolly et. al 1990), and facilitate the engagement of learners with their roles, as well as engender reflection on the role-played (Cornelius et. al., 2009, 2011).

The reassurance role-played by the anonymity in online sessions, indeed, seems an essential factor on easing learning processes, as it supports

participants in being consistent to the roles to be enacted. Additionally, as clearly emerges from free text responses, acting through avatars it seems to allow more room in exploring, and playing, alternative roles. On the other hand, it is interesting to note that, according to the opinions of trainers, the possibility to assume specific emotional, behavioural and physical properties through the avatars seems not to be a decisive factor in order to help a greater identification with the character to play. This seems to be confirmed by the perception that one of the main vulnerable points associated to online roleplays is related to a general decrease of role and emotional engagement. Indeed, it has emerged, and openly confirmed by a number free text comments, that the lack of role and emotional engagement is considered one of the most important element affecting the motivation of participants in the learning process and the derail of training goals. In conclusion, it seems to be crucial the aspect of making both the engagement and the relationships between participants emotionally more relevant in online role-play.

Interestingly, another important element that would help the diffusion and increment the usability of online role-play techniques in soft skills training is the training itself about the usage and feature of the technology.

A large consensus amongst the professionals, and also one of the most quoted difficulties in implementing online role-playing in training practice, regards the provision of adequate training for both professionals and trainers to the use of the online role-play, as perception of failure is often associated to the lack of familiarisation with the methodology. Indeed, professionals share the perception that not experienced trainers can compromise the effectiveness of the process. On the same vein, another mentioned possible factor is related the complexity of combining game design with training needs analysis: A factor that could affect motivation and commitment of trainers.

This problematic element remarks the idea, emerged also in free test responses, that the role of trainer is considered particularly critical in online role-plays. It is, indeed, acknowledged as one of the key differences between online and face-to face activities, the fact that in online session the trainer is especially important in facilitating the quality of interaction between
participants and the achievement of the learning objectives. It is a general perception that, in order to achieve an acceptable level of training experience, trainers must be skilled in mastering different tasks at once. In fact, in addition to role-assignment, feedbacks and debriefing delivery, management and analysis of dynamics, trainers need to ensure a correct use of the tool and its features in order to support the accomplishment of training needs. They seems to feel the discomfort of having too many variables to take into account and they might need the intervention of other trainers for supporting game, observation, and feedback processes.

In connection to the previous aspect, amongst the difficulties of implementing online role-plays for supporting traditional learning practices, another interesting factor is attributed to possible differences in technical skills and access to technical resources (between countries and age group of people involved), which is an interesting side effect of the well know societal and economical digital divide. With respect to role of the trainer the results seem to remark the crucial role of the trainer through the entire process of the role-play: the definition of the learning scenario-environment, the monitoring of the role-play, its course and dynamics; and the assistance offered with feedback and debriefing in order to maximize learning (Dawson, 1990; Thatcher, 1990; Perry & Euler 1988; Glandon, 1978; Shirts, 1976).

CHAPTER 5. The S-cube project and Competency Model

In this chapter we will provide a brief outline of the S-cube project, of which the author has been responsible for writing up the proposal in collaboration with the consortium partners, and description of competency model adopted in the project for the assessment of soft-skills within the group targets involved in the research.

Four European Countries are currently involved in the S-cube project: Plymouth University (UK), University of Naples (IT), Cork Institute of Thecnology (IE), and GePros (DE), with the aim to develop online role-play training which will help Social Enterprises actors to improve soft skills.

The project is funded by the European Commission through the *Leonardo da Vinci Lifelong Learning Programme*, 2011 (Transfer of Innovation action).

5.1 Introduction

Within the fields of training and education role-play simulation is receiving increasing recognition for its capacity to provide generative learning for users. Such trainee-centred learning activities can readily facilitate active learning through "learning by doing" (e.g. Bandura, 1986; Kolb, 1984). Training scenarios can be developed through role-play which reproduce real life situations, and through their verisimilitude can promote the transfer of soft skills to similar real life problems and contexts. Computer-based e-learning systems can provide the scaffolding for role-play simulation to be used to promote skills development in individuals employed across a range of different workplaces, not least Social Enterprises (SEs). This type of organisation can benefit from the availability of open source e-learning tools.

SEs have grown in numbers in the EU over recent years. Whilst variations exist between the countries involved in the proposed project, in terms of the legal forms of SE, their prevalence, policy frameworks to support activity, and the extent of existing research (EMES European Research Network, 2008), commonalities also exist in the challenges faced. SEs typically arise through community action, whereby individuals come together to address a particular

need. Such communities often face socio-economic disadvantage. Research for the UK Small Business Service (IFF Research, 2005) found that 51% of SEs are located within those 40% of wards in the UK identified as being most deprived. They also found that beneficiaries of SEs include people with disabilities (19%), children and young people (17%), the elderly (15%), people on low incomes (12%), the unemployed (10%), other vulnerable groups (9%), ethnic minority groups (7%), women (6%) and the homeless (4%).

A need exists for those involved in the management of SEs to possess skills appropriate for operating commercially. The distinctive nature of SEs presents unique difficulties. The Austrian Institute for SME Research (AIFSMER, 2007), in their study for the EC (DG Enterprise & Industry), found that SEs across the EU face challenges of sustaining commercial viability and social impact. They can have limited control over supply and prices, financing, personnel recruitment and people management issues (many SEs meet their social objectives by employing marginalised groups). Managing a SE requires both "hard" analytical skills and "soft" skills. Harding (2010), studying "hidden SEs" found that 26.3% of "broad social entrepreneurs" had owned a business before, compared to 32.3% of mainstream entrepreneurs. Hence, a greater proportion of individuals running SEs lack business ownership experience, giving rise to skills shortfalls in areas such as communication, negotiation, team working sales and people management. One recommendation to the EC by the AIFSMER is that SEs require tailored management training.

SEs are often smaller, less well-resourced and more spatially dispersed than other enterprises. Hence, access to training opportunities can be limited. This project will provide an affordable and accessible means for those working in SEs to access online training to enhance their soft skills.

5.2 Aims of S-cube project

The overall aim of the S-cube project is to spread the use of online roleplay for providing a training experience to enhance the soft skills of individuals working within social enterprise settings. This will be achieved by adapting and transferring an existing 3D open source graphic multiplayer platform – Eutopia - (see chapter 3), and the products of a previous TOI Leonardo Project to the new setting of SEs. The project objectives involve the use of a state-of-the-art e-learning approach which contributes to the enhancement of "learning by doing" practice for soft skills training. In line with the results of a preliminary need analysis, the training scenarios will be mainly focused on the development of soft skills in areas such as communication, negotiation, team working, sales and people management. A dedicated training need analysis (TNA) has been conducted to identify soft skill needs for a range of specific SEs. In order to make the training experience more effective and immersive for the participants, novel learning scenarios are created. Chapter 6 will be dedicated to the description of the TNA study.

The Eutopia software has already facilitated an active learning approach to soft skills development through a number of previous trials of scenarios in different EU projects and countries. Consequently, the product is internally coherent and its method of delivery is robust and validated. This provides a level of confidence in the ability of this project to achieve soft skills development at a low cost, using accessible and flexible VET product within SEs settings. Consequently, the free online delivery of the training allows both geographic and resource barriers to training access to be overcome.

This product allows high fidelity SEs orientated scenarios to be developed and exploited, thus enabling generative learning to take place through an immersive learning experience.

We aim to spread the use of the Eutopia software in more settings, by providing workshops and tutorials for a number of SEs in the UK, Germany and Ireland. Moreover, through the active involvement of the consortium network, we intend to extend the applicability of the software and the proposed e-learning approach to new professional and social contexts.

The testing of the product is currently taking place in the mainland of the UK, Ireland and Germany. To date, there has been no such application of the technology innovation in these regions and whitin SEs settiengs.

The existing Eutopia evaluation protocol consists of a set of questionnaires used to assess the level of soft skills after training has been undertaken.

The use of simulation games as a tool for developing generative learning experience has received a great deal of attention in the training & education fields. Trainee-centered activities facilitate an active learning approach through "learning by doing". This approach has been largely recognised as a more effective training methodology than traditional teacher-centered approaches to instruction (e.g. Bandura 1977; Dewey 1966; Kolb 1984). The S-cube project aims to develop training scenarios which reflect real SEs working situations, which can ensure transference of soft skills to similar real life problems and contexts.

The virtual environment allows trainers to create SEs training scenarios where participants can assume roles, mediated by artificial agents (avatars) endowed with physical and emotional features. During the simulation sessions, participanta can interact through two communication channels: verbal (textual communication via chat) or non-verbal (volume and tone of the voice, gestures/movements, proxemics, facial expressions, etc.).

The training scenarios and specific characteristics of avatars can be defined according to a storyboard which underpins achievement of specific learning objectives. The participants' reflections upon feelings, dynamics, and thoughts emerging from this interactive experience enable the generation of a new way of thinking and acting. Learning from experience involves indubitable interconnections between doing, thinking and behaving.

5.3 Pedagogical aspects and training approach in e-learning scenarios

It was mentioned above that e-learning methods refer to the use of ICTs to facilitate and support the learning process. Meyen et al. (2002), writing about e-learning, defines it as the acquisition and use of knowledge which is distributed and facilitated primarily by electronic means.

E-Learning can be carried out in several ways, which includes computer based asynchronous and synchronous learning. Consequently, an environment where the participants take ownership of their learning is created. E-learning as a concept encompasses a variety of tools for stimulating and maximising the learner's learning potential. It can be used as pure technology or in combination with traditional face-to-face methodologies; this is commonly referred to as blended learning. This method is often used when technologies are not available and or when personal contact is particularly critical. In the Scube project, we made a deliberate choice of using this mixed method, with face-to-face contacts so also to introduce participants to the e-learning platform and supporting technologies.

More recently, new e-learning technology, based on simulation gaming, has been developed and introduced in education and training settings to promote and enhance interactive learning processes through "learning by doing" practice. Online role-play can range from simple text based games to games that incorporate graphics and virtual worlds which are populated by many players simultaneously. Through gaming, social communities can be created and maintained. Such communities can facilitate levels of collaborative and generative learning. The S-cube project adheres to the original methodology that inspired the Eutopia project which refers to the importance of embedding role-play principles in simulated scenarios. The methodology for designing and delivering our Educational Multiplayer Online Role Play Game (EMORPG) is underpinned by a number of established psychological, sociological and pedagogical frameworks (e.g. Moreno, 1946).

Despite the advancement of e-learning tools, several emerging issues have arisen, such as the importance of a well-defined pedagogical approach supporting the e-training process; the lack of ICT competencies (these should be prerequisite to trainers and participants if effective learning is to occur); the lack of an effective methodology for the measurement and evaluation of the etraining outcomes. This last point is particularly true with respect to the soft skills training and development, due to the intrinsic difficulty of quantifying the extent to which subtle behavioural changes have occurred. The S-cube training methodology is centred on a blended learning approach for soft skills training. Using face-to-face meetings, trainees will be introduced to the software and the "virtual community". Within the S-cube role-play environment, trainers will facilitate the communication between participants, and help in identifying potential areas of personal development. The rational is to create immersive role-play simulation scenarios based on real time interaction that will promote an active learning approach to soft skills development.

Simulation based on role-play an extremely valuable method for soft skills training. It is a flexible tool that allows the design and experience of realistic learning scenarios in the way that best suits trainees' individual needs, situations, languages or learning styles. Moreover it encourages critical thinking and creativity, and allows participants to develop and practice behavioural, interpersonal, as well as intrapersonal skills through a learning-by-doing method.

Indeed, it has been widely recognised by psychologists and educationalists that active learning methods which allow "learning by doing" arouse interest and generate motivation, thus providing a more engaging experience for the learner (Lewin, 1951; Brookfield, 1986; Kolb, 1984). Under this perspective, interactivity is seen as part of a system where learners are not passive recipients of information, but can actively explore a simulated scenario that is responsive to their own actions.

The project is based on the constructivist approach (Piaget, 1950). Within it, the idea that learning is based on direct experience at both individual and social dimensions is promoted. This is thanks to the immersive scenarios in which learners can freely interact with each other. Indeed, Houle (1996) claims that it is the social dimension that is often the primary motivation for some types of learner. The role of the trainer in this environment is to provide guidance, challenge the learners' understanding , promote dialogue and feedback.

Measures of soft skills training needs and efficacy are based on both the "Competency Modelling" approach (Boyatzis, 1973), that will be described in following paragraphs, and Kirkpatrick's (1959) training evaluation theory.

5.4 Definition of Social Enterprise

As the S-cube project is devoted to delivering soft-skill training is Social Enterprise, clarifying this concept is of utmost importance for this work. The notion of Social Enterprise (SE) first appeared in Italy in the late 1980s. Thanks to the work carried out by the EMES European Research Network, this term started to be used at the European level in the mid-1990s.

The conceptualization of Social Enterprise proposed by the EMES has been developed through a constant dialogue involving researchers from all parts of the European Union, having different social, political and economic backgrounds and traditions. This definition is based on four economic and five social criteria, that do not represent rigid conditions identifying what a Social Enterprise is, instead they tent to describe an "ideal-type" of organisation that can help researchers to locate and establish the boundaries of what can be can considered as Social Enterprises. The EMES definition of Social Enterprise states that: "Social Enterprises are not-for-profit private organizations providing goods or services directly related to their explicit aim to benefit the community. They rely on a collective dynamics involving various types of stakeholders in their governing bodies, they place a high value on their autonomy and they bear economic risks linked to their activity" (Defourny, 2001).

The interest around SEs has increased in the last decade, gaining an extraordinary development especially in European countries and the United States, although the concept of Social Enterprise has not gained the same recognition in all European countries.

Different definitions of Social Enterprise reflect different traditions, law framework, as well as different attention and support from politics organisms.

While the position on SEs in Europe tend to stress on the combination of profit with philanthropic, sustainable and social missions, in US there is the tendency to define Social Enterprise only as non-profit earned income strategies organization, more oriented towards the market in response to decreasing of both public subsidies and private grants from institutions. The European Commission has recognised the contribution of Social Enterprises to national economies across the EU. The EU definition for Social Enterprise is outlined below (European Commission, 2011:2):

"A Social Enterprise is an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives. It is managed in an open and responsible manner and, in particular, involves employees, consumers and stakeholders affected by its commercial activities".

The Commission applies the term Social Enterprise to the following types of business:

- those for which the social or societal objectives of the common good is the reason for the commercial activity, often in the form of a high level of social innovation;
- those where profits are mainly reinvested with a view to achieving this social objective;
- where the method of organisation or ownership system reflects their mission, using democratic or participatory principles or focusing on social justice.

The UK Government (DTI, 2002) defines Social Enterprise as "A business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profit for shareholders and owners". Social Enterprises can be structured as a for-profit or non-profit, and may take the form of a co-operative, mutual organization, a social business, or a charity organization (Ridley-Duff and Bull, 2011).

The EMES, EU as well as DTI definitions present similarity on which activities and scopes of Social Enterprises should be. Their activities must have positive social and economic outcomes with re-investment of profits, and an absence of payment to shareholders. The ideal SE may have in addition positive environmental aspects to its activities and focus. The term Social Enterprise describes the purpose of a business, not its legal form (for more information about EU and country specific policy of Social Enterprises, please refer to Appendix 2).

Social Enterprises represent a different way of doing business to that which is usually and traditionally understood in the context of a commercial business, whose main function is to make a corporate and financial profit (often referred to as the "single bottom line"). SEs operate within the social economy and, as it has been stressed, their aim is to make both a positive social impact, as well as and a financial profit from its commercial activities. This is sometimes referred to as the "double bottom line". Financial profits generated by the Social Enterprises are reinvested into initiatives and activities that have social objectives, thus creating a social dividend for the community in which it operates. Many SEs commit to the "triple bottom line", which additionally includes to sustainable environmental practices within the SE, where it endeavours to respect the natural order, and strive as much as possible, or at least to do no harm, curtail environmental impact.

5.4.1 Importance of Soft Skills for Social Enterprises

Although the variations existing between EU countries (Appendix 2), in terms of the legal forms of SEs, their prevalence, policy frameworks to support activity, and the extent of existing research (EMES European Research Network, 2008), also exist commonalities in the challenges they face. Social Enterprises typically arise through community action, whereby individuals come together to address a particular need. Such communities often face socio-economic disadvantages.

A need exists for those involved in the management of SEs to possess skills appropriate for operating commercially. The distinctive nature of SEs presents unique difficulties. Managing a Social Enterprise requires both 'hard' analytical skills and "soft" people skills and a clear necessity that Social Enterprises require tailored management training (IFF Research, 2005; AISFMER, 2007).

While using the *single, double* and *triple* bottom lines as hallmarks to distinguish between the traditional corporate business model and Social

Enterprises, we can clearly see that both models have strong commonalities. The Social Enterprise, similar to the corporate model has to be competitive and sustainable to succeed. Given the strong social emphasis within a Social Enterprise, it is evident there is an enhanced closeness of fit between the Social Enterprises and the development of soft skills. An improved development of soft skills within Social Enterprises contributes to human resource employment practices that are aligned to a more socially responsible work environment. It also helps to create and develop a culture of business practice that is socially and corporately responsible that can impact on all stakeholders and ultimately can contribute substantially to the social aims of Social Enterprises.

5.5 Competency model and observational indicators

It has been widely recognised the importance of Competency Models (CM) within organisation as a strategic tool for driving organisational change and development. Initially developed for selection purposes, its use has been spread to a variety of HR applications: assessment, development, performance management, planning career path, training design, and definition of new critical jobs.

The TNA phase presented in the next paragraphs has also informed the development of a competency model for designing a training process for soft skills development within SEs. The S-cube CM centres on 17 competencies grouped in 3 clusters:

- Inter/Intra Personal Skills: Resilience, Active listening, Flexibility, Selfawareness, Personal effectiveness, Understanding relationships and Judgement.
- Communication Skills: Communication, Consultation, Ability to influence and Being able to convince.
- Total Quality Management: Effective leadership, Conflict resolution, Creative problem solving, Team building, Strategic thinking and Decision making.

For each competency, behavioural indicators have been identified for a more accurate objective assessment process to be undertaken during the project process. This CM could be successively used to define personal career development plans emerging during the assessment process.

5.5.1 *Competence and competency*

Before proceeding with the description of the S-cube Competency Model, it would be worth to focus on the controversial and little consensus existing on the definition of competency that reflect the same difficulties that have been encountered in literature for the definition of the concept of soft skill.

The concepts of competency and competence have dominated the literature concerning management strategy in the 90°. The terms "competency" and "competence" are often used interchangeably for defining the same concepts, causing confusion and misunderstanding. Considering all the different ways the two concepts are used is almost impossible to identify a univocal clear distinction. Some authors argued that the confusion is generated by the spelling of the worlds, where the term competence is attributed to the UK English and competency to the US English spelling (competence with competences as plural and competency with competencies as plural). Other authors argued that competence is mainly related the UK approach, while competency is part of the US tradition. It also has been found out that, in English the term competence tends to be used interchangeably with knowledge, skills, or ability (Sultana, 2009, p. 20). In literature is possible to find more than 50 different definitions for competence and competency.

As Pate and colleagues (2003) have pointed out there are many differences and some similarities between competence models and competency models in their definitions, areas of focus, applications, cultural traditions, and epistemological assumptions.

Burgoyne (1988) distinguishes between "being competent" (meeting the job demands) from "having competencies" (possessing the necessary attributes to perform competently). The psychologist Woodruffe (1991) offers the clearest distinction between the two terms by contrasting areas of competence, defined

as aspects of the job which an individual can perform, with competency referring to a person's behaviour and underpinning competent performance, he seems to recall the distinction between soft and hard skills illustrated in chapter 1. "Competency is a person-based concept which refers to the dimensions of behaviour lying behind competent performances" (Woodruffe, 1991). From this perspective competency is defined as behavioural characteristics (soft skills), whilst competence is described as a work-related concept which refers to areas of work at which the person is competent. Competence describes what people have to be able to do and expected to know in order to perform effectively their work. In the last years the term competency has been developed so to embrace both the concept of soft and hard skills. A large part of the US literature today focuses on job related competences (functional model) often with associated underpinning competencies. Similarly the functional model developed especially in Europe has expanded the definition of competence that also include mastering of skills and understanding and aspect of personal effectiveness (MSC, 1986). Snyder and Ebeling (1992) refer to competence in a functional sense, however they use competencies for the plural.

In 1973 David McClelland asserted that QI and aptitude test as well as school grades cannot be considered significant predictors of future success in carrier and life. He stated that tests in addition to the traditional cognitive variables (reading, writing, calculating) should also assess personality dimensions, such as communication skills, goal setting, self-development. As all these factors are related to competence, for referring to them McClelland coined a new word with similar spelling: "competency" (plural competencies) defining personal characteristics that allows to effectively perform a task within a given organisation.

Measuring competency in the work place first gained prominence when David McClellenad wrote what is now seen as a seminal article entitled, 'Testing for competence rather than for intelligence.' McClelland first referred to competency in this context 'as a critical differentiator of performance' (Boyatzis 2007). Competencies, or individual characteristics, were recognised by McClelland and colleagues as significant predictors of employee performance and success. They are related to the capability of applying knowledge, personal characteristics and behaviours to successfully perform either a specific work, tasks, or functions, and effectively operate in a certain role or position.

In 1982, at the age of 80, McClelland was interviewed for Competency & Emotional Intelligence by Katherine Adams. During the interview he stated that coined the term competency to overcome the more limited concept of skill, so to include behavioural as well as technical abilities. To who criticised his definition for being too broad he replied:

"Competency was a term that was coined to replace the narrower term skill [...] We call it competency because it is [something] obviously more than just skills, it covers a variety of types of acts, and each of these gets incorporated into the dictionary definition of a particular competency. There are particular behaviours behind each competency and you can look them up".

Boyatzis (1982) pointed out that maximum performance is believed to occur when the person's capability or talent is consistent with the needs of the job demands and the organisational environment. He also stressed that "Competencies describe what a person can do, not necessarily what s/he does, nor does all the time regardless of the situation or setting" (ibid).

In essence Boyatzis defined "competency" as an underlying characteristic of an individual behaviour that is causally related to effective job performances.

Boyatzis and McClelland's research pointed on defining competency variables that could be used to predict job performances not biased by race, gender and socio-economic factors. McClelland developed a tests to predict competence as opposed to intelligence and introduced this approach to the McBer consulting firm. Subsequently McClelland described the characteristics underpinning superior performances as competency. Competency captures skills and dispositions behind cognitive ability such as self-awareness, selfregulation and social skills. Though some of them belong also to the personality taxonomy, competency is fundamentally behavioural and can be learned through training and development, unlike intelligence and personality (Mcclelland 1998). Within this tradition competency is defined in terms of "Underlying characteristics of people that are causally related to effective or superior performance in a job, generalizing across situations, and enduring for a reasonably long period of time" (Boyatzis, 1982; Guion, 1991; Hay Group et al, 1996; Klemp and Spencer, 1982; Spencer and Spencer, 1993).

Recently in Europe has been gaining ground a holistic approach to competence (Le Deist and Winterton, 2005) that covers cognitive, functional, personal, ethical, and meta-competence (Cheetham and Chivers, 1996; 1998). These five dimensions are outlined below:

1) Cognitive competence. It includes underpinning theory and concepts, as well as informal tacit knowledge gained experientially. Knowledge (know-that) underpinned by understanding (know-why), is distinguished from competence.

2) Functional competences (skills or know-how), those things that a person who works in a given occupational area should be able to do and demonstrate.

3) Personal competency (behavioural competencies, know-how-tobehave), defines a relatively enduring characteristic of a person causally related to effective or superior performance in a job (Spencer 1995).

4) Ethical competencies, defined as the possession of appropriate personal and professional values and the ability to make sound judgements based upon these in work-related situations' (Cheetham and Chivers 1996: 24).

5) Meta-competencies, concerned with the ability to cope with uncertainty, as well as with learning and reflection (Brown, 1993; Nordhaug, 1993).

The first three dimensions (cognitive, functional and social competences) are related to knowledge and understanding (know that) to skills and behaviour (know how), and attitudes (know how to behave). These levels regards what an individual needs to master for facing both personal and professional lives. The dimension of meta-competences (ability to reflect and learn) represents an overarching level that facilitates the acquisitions of other competencies. The figure below (Figure 5.1) shows as the interrelation among the four dimensions contains the key for a successful superior performance.



Figure 5.1 Multimensional holistic approach for competence

5.5.2 Competency modelling

In our perspective the concept of competency goes beyond the sub concepts of skill or and knowledge. Competency it is more about self-awareness, personal change and transformation that individuals pursuit for changing their personal and professional lives for the better.

In Human resources management, competency modelling has many potential uses for a variety of different areas and departments: selection, assessment, training design, career development paths, etc. From the perspective of the S-cube project we are particular interested in how a competency model can be used for the creation of training and development programs, by identifying a set of key competencies tailored to the training needs of a given organisation.

A competency can be observed and measured by identifying the behaviours, tangible results or outcomes which are expression of their use within a specific contest (professional and/or private).

A competency model can be defined as a descriptive tool of the competencies required for a fully successful performance in a specific job category, work in team, department, division, or organization.

The first competency model was developed by Mclelland and colleagues at the McBer consulting firm in the early 1970s. The research team developed a methodology based on the following three aspects: 1) focus on outstanding performers; 2) use of behavioural event interviews; thematic analysis of interview data and distillation of the results into a smaller set of competencies described in behaviourally specific terms (R. S. Mansfield, 2000). The competency methodology developed by McClelland can be summarised in the following two main aspects:

- Use of criterion samples, by identifying successful characteristics differentiating outstanding performers and average performers;
- Identification of operative behaviours that are causally related to successful outcomes (the way people act can be considered as a predictor of the way they will behave in future similar situations).

According to the definition given by Woodruffe (1991), while for competency model the area of focus is directed on the definition and identification of skills, knowledge, attributes that successful people have, on *how* people act effectively, the main objective of the competence model is defining measurable criterion describing *what* people have to accomplish in order to achieve a certain goal.

The McBer Model has become a major mainstream practice in human resource management. Over the last two decades the model has been evolved and developed according to the changes in organisations that have started using it in different ways and in order to address specific needs. There have been a variety of different approaches developed by HR professionals and consultant. However they are all mainly based on the use of three sources of data for defining competency models: resource panels; critical event interviews; generic competency dictionaries.

In 1981, Boyatzis was commissioned by the American Management Association to derive a generic model of managerial competency from the various models had developed to date by McBer. He concluded from the research that there are 19 generic competencies that distinguish outstanding managers, grouped into five clusters: 1) goal and action management, 2) leadership; 3) human resource management; 4) focus on others; and 5) directing subordinates.

He also highlighted that though was found a great commonality across different organisations the context is important and not all jobs requires mastering all 19 competencies, and there are other competencies that may also be required in any given job. More recently after a long partnership with Goleman, it has been identified a model that comprises of 18 competences grouped in 4 clusters (Boyatzis et al. 1992).

Boyatzis (1982) highlighted that a theory of performance is the basis for the concept of competency. The theory presented below states that *a maximum performance is believed to occur when the person's capability or talent is consistent with the needs of the job demands and the organizational environment* (Figure 5.2 Model of effective job performance).



Figure 5.2 Model of effective job performance

5.6 The S-cube Competency Model

Below is reported the S-cube competency model developed within the project TNA phase. The competency clusters and definitions of possible behavioural indicators are identified as relevant for the interviewed stakeholder before commencing the training need analysis are listed below.

There have been identified 3 competency cluster each comprising of specific competencies representative of cluster itself.

- Inter/Intra Personal Skills: Resilience, Active listening, Flexibility, Self-awareness, Personal effectiveness, Understanding relationships and Judgement.
- **Communication Skills**: Communication, Consultation, Ability to influence and Being able to convince.
- Total Quality Management: Effective leadership, Conflict resolution, Creative problem solving, Team building, Strategic thinking and Decision making.

The use of those three clusters take inspiration from the model proposed by Whetten et al. (2000) that distinguished between: 1) intrapersonal skills: selfawareness, managing stress and effective problem-solving; 2) interpersonal skills: communication, motivation and conflict management; 3) people management: empowerment, delegation, teamworking, leadership and management.

The same distinction between intrapersonal and interpersonal is used by both D. Goleman (2002) and H. Gardner (1993).

Grouping of skills such as effective leadership, creative problem solving and strategic thinking into total quality management has been taken inspiration by Bull et al. (2002).

The Communication skill cluster draws on the work of D. Goleman and Ridley-Duff et al. (2011).

5.6.1 Inter/Intra Personal Skills Cluster

This cluster comprise of the following subset of competencies: Resilience, Active listening, Flexibility, Self-awareness, Personal effectiveness, Understanding relationships and Judgement. Definition of cluster and relevant observational indicators are detailed below.

Resilience

Definition

Being able to 'bounce back' and resume effectiveness in the face of a set back or failure.

Examples of behavioural indicators

- Deals effectively with pressure.
- Remains optimistic and persistent, even under adversity, recovering quickly from setbacks.
- Handle disappointment and/or rejection, works effectively keeping in mind the objective to accomplish.
- Listens and responds assertively to criticism, managing aggressive feelings while working under conditions of stress, frustration, or tension.
- Considers mistakes as source of value for continue learning and development.

Active listening

Definition

Being able to engage with others in a way that assures them that you are listening, fully understanding and considering what is being said (ideas, feelings, thoughts)

- Reformulates and paraphrases content or point of messages/conversations so to enhance clarity of communication.
- Asks open questions to clarify or check understanding.

- Able to provide and receive effective feedback, withholding judgment and interpretation when expressing feelings, ideas.
- Uses messages in the first person, taking full responsibility for personal understanding and or behaviours.
- Encourages open expression of feelings, emotions, ideas and needs.
- Recognises the importance of individual feelings and opinions.
- Helps people to come up with their own answers rather than solving problems for them.

Flexibility

Definition

Being able to display an understanding that situations can change and consequently plans may have to be re-visitied. Rigidity when dealing with human beings can be problematic.

Examples of behavioural indicators

- Is open to the benefits of change, embraces appropriate new ideas.
- Considers alternative approaches according to the needs of situations.
- Seeks guidance in adapting behaviour to the needs of a new or different situation
- Weighs up costs and benefits impartially.
- Is willing to investigate options in depth, even when they are the ideas of others.
- Thinks creatively to resolve problems.
- Seeks opportunities for change in order to achieve improvement to work processes.
- Adapts to new ideas and initiatives across a wide variety of issues or situation.
- Acknowledges when something is unknown and takes steps to discover possible solutions.

Self- awareness

Definition

The ability to know oneself, both physically and mentally at any given time

and the effect that is having on oneself and others.

Examples of behavioural indicators

- Focuses on personal improvement and looks for opportunities to improve developmental areas.
- Recognises the importance of how he/she is perceived by others.
- Asks for constructive feedback from peers, staff, supervisors, etc.
- Is open to others' feedback, listens and responds assertively to criticism.
- Is aware of personal limitations and accepts asking for support and assistance for accomplishing a task.
- Capable of self-management when working under conditions of stress, frustration or tension.
- Sensitive to one's own strengths, emotions, and needs.
- Knows when and how to say "no" assertively.

Personal effectiveness

Definition

The ability to consider one's own personal effect on matters and measure effectiveness in that context.

- Adapts approach or style to a range of individuals and circumstances.
- Continues to work effectively when under pressure.
- Shows determination in dealing with difficulties.
- Has an insight into own strengths and weaknesses.
- Seeks feedback on performance and takes positive steps to improve.
- Takes responsibility for own learning/development needs.
- Clarifies process of working as well as focusing on content.
- Willing to make decisions and accept responsibility.
- Copes with set-backs/disappointments.
- Consistently sets and achieve high standards.
- Shows initiative, modifying behaviours to accommodate tasks,

situations and individuals.

Understanding relationships

Definition

The ability to understand the dynamics between individuals and groups so as to read the 'sub-text' of how people are inter-acting and re-acting

Examples of behavioural indicators

- Pursues learning opportunities and ongoing personal development.
- Effectively understanding him/herself and others, individuating and recognising possible communalities for seeking shared objectives.
- Facilitates effective communication across team groups to outline sharing of meanings.
- Supports and encourages others to share experience, knowledge and best practices.
- Adapts style of communication (verbal and non verbal) to the interlocutor to facilitate open expression of feelings, emotions, perception, perspective, etc.
- Encourages people to openly discuss for create alternative solutions to a problem.

Judgement

Definition

The ability to consider and comprehend all factors relating to reaching an understanding of a situation.

- Can evaluate, foresee and anticipate the consequences of a problem.
- Makes decisions on the basis of logical inferences, considering implications, alternatives, and consequences.
- Considers possible implications and alternatives when making decisions and takes into account others' perspectives before making a decision.

- Possesses the capability to make quality decisions even during highly stressful or ambiguous circumstances.
- Does not make a decision based strictly on emotions or unclear facts.
- Identifies issues, conducts research, gathers relevant information, and considers possible hypotheses and potential solutions before making a decision.
- Weights and considers alternative available actions before selecting a method for accomplishing a task.
- Refrains from "jumping to conclusions' based on minimal fact-based or data-based information; takes time to collect facts before decision-making.
- Balances needs and desires with available resources and constraints.

5.6.2 Communication Skills Cluster:

This cluster comprises of the following subset of competencies: Communication, Consultation, Ability to influence and Being able to convince. Definition of cluster and relevant observational indicators are detailed below.

Communication
Definition
Being able to impart information in a clear, precise and unambiguous way.
Examples of behavioural indicators
• Asks open-ended questions that encourage others to give their points of
view.
• Keeps people accurately informed and up to date.
Assertively expresses own opinions.
• Uses "I statement", taking full responsibility for personal understanding
and or behaviours.
• Refrains from immediate judgment and criticism of others' ideas,
delivering criticism in a way that demonstrates sensitivity to the
feelings of others.
• Able to give and receive effective feedbacks as a source of reflection
and growth.
• Focuses on understanding the message delivered, waits for the other
person to finish their intended message before responding.
• Encourages staff to keep one another informed and share information,
feelings ideas and expectations.
• Uses vocabulary which is appropriate to the audience to ensure that the
message is understood.
• Asks questions as necessary to clarify a message being delivered.
• Encourages constructive discussion, different ideas and points of view
as valuable.
• Actively listens to co-workers and customers to put him/herself in their

shoes to gain a better understanding of their positions.

• Communicates intentions, ideas and feelings openly and assertively.

• Communicates verbal messages that are consistent with no verbal messages (body language).

Consultation

Definition

Appreciating the significance of people's opinions, particularly when important decisions are to be made.

Examples of behavioural indicators

- Focuses on others' needs, wants, and expectations when seeking to understand and contextualise a problem.
- In making decision tries to establish clear roles, objectives and resource involvement for implementing the better solution.
- Aware of the differences in style among people, adapts communication approach to a range of individuals and circumstances, considering differences as valuable source for making appropriate decisions.
- Motivate people to be proactive and take action, so that they feel active part of the decision process.
- Maintains empathy, in difficult situations where critical decisions have to be taken is able to identify and understand others' feelings by avoiding to engage the emotions of others, leading to the most appropriate decision.
- Listens actively, asks open-ended questions, able to paraphrase interlocutors' messages so to use verbal and nonverbal signals to engage people.

Ability to influence

Definition

The ability to offer reasoned debate on a subject, so as to persuade and gain agreement.

Examples of behavioural Indicators

• Mobilises people to take action, using creative approaches, motivate

others to meet common goals.

- Asserts own ideas and persuades others, gaining support and commitment from others.
- Influences others through using integrity and assertiveness, not being manipulative.
- Works to make others feel ownership of one's own solutions.

Being able to convince (as aspects of negotiation/persuasion)

Definition

The ability to win people over to one's own way of thinking by presenting rational and best ideas that show a better route and outcome to a concept or action.

- Focuses on the needs of the other people or parties for a better understanding of others' expectations
- Listens actively, take time to listen carefully to others to establish personal interests and expectations.
- Use positive rather than negative language: instead of saying "You're wrong about this", say "That's true, let's try to consider this from a different perspective ".
- Mirrors other people ideas and feelings so as to enhance clarity of communication and understanding.
- Communicate assertively, maintaining the attention of others.
- Explains the benefits of an argument.
- Develops logical reasoned argument, and analyses the implications of actions.
- Puts people's points across assertively, clearly and concisely.
- Understands the concerns and needs of people who they deal with.

5.6.3 Total Quality Management Cluster

This cluster comprises of the following subset of competencies: Effective leadership, Conflict resolution, Creative problem solving, Team building, Strategic thinking and Decision making. Definition of cluster and relevant observational indicators are detailed below.

Effective leadership

Definition

The ability to motivate people to work effectively towards goals in a collective fashion.

- Delegates routine elements of complex tasks and encourages others to do the same, confirms when others have understood and learnt from delegated tasks.
- Serves as a role model to others, demonstrating commitment and a willingness of challenging goals and objectives.
- Treats each team member equitably, and acts as a facilitator when team members experience conflict.
- Provides constructive feedback, creates a climate where everyone feels they can take risks, makes mistakes and learn from them and is willing to support others.
- Helps team members to come up with their own answers rather than solving problems for them.
- Motivates people to consider innovative solutions and accomplish challenging goals.
- Uses positive assertive approaches to influence others, without manipulating people.
- Establishes measurable and achievable expectations of results.
- Communicates a vision to effectively pull others through a changing environment.

Conflict resolution

Definition

The ability to facilitate a process whereby conflict is resolved between parties

Examples of behavioural indicators

- Looks for solutions that meet people's personal or departmental needs.
- Works to resolve conflict among team members by showing respect for others' opinions.
- Redirects others when they begin to lose focus on the critical issues that need to be resolved.
- Demonstrates a keen ability to distinguish between critical and noncritical conflicts.
- Use "I win you win" negotiation paradigm, working toward mutually agreeable solutions.

Creative problem solving

Definition

Being able to approach problems from a number of perspectives, thus increasing the possibilities of successful solutions.

- Undertakes a complex task by breaking it down into manageable parts in a systematic, detailed way.
- Anticipates the consequences of situations.
- Thinks of innovative explanations or alternatives for a situation.
- Identifies several possible information sources needed to solve a problem effectively.
- Obtains input from internal/external contacts that are closest to the problem.
- Presents problem analysis and recommended solution to others rather than just identifying or describing the problem itself.

- Anticipates potential obstacles and develops contingency plans to overcome them.
- Considers the organisation's priorities when making decisions or analysing the costs and benefits of various alternative solutions.

Team building

Definition

Being able to generate a positive spirit and attitude amongst workers which incorporates positivity, happiness and positive outcomes for the organisation

Examples of behavioural indicators

- Takes appropriate actions to gain cooperation and build consensus.
- Develops and maintains positive working relationships with co-workers and customers by being timely and maintaining a positive attitude.
- Understands how others perceive him/her.
- Is aware of the differences in style among people and adapts one's own style to better work with others with differing styles.
- Adapts behaviours depending on the situation and according to individual differences within team groups to achieve desired outcomes.
- Establishes a climate of confidence and mutual respect.
- Takes actions to improve relationships between others.

Strategic thinking

Definition

Contextualising thinking into a wider sphere, so all possibilities and outcomes are visible.

- Sees the "big picture" or long-term implications of actions, anticipating possible issues or difficulties.
- Sets personal work goals in line with operational goals of work area.
- Foresees obstacles and opportunities for the organisation and acts accordingly.

- Defines issues, generates options and selects solutions which are consistent with the strategy and vision.
- Works with staff to set strategic goals for specific sectors of the organization.
- Proactively helps others to understand the importance of strategy and vision.

Decision making

Definition

Being able to reflect on all implications and considerations and arrive at an informed decision.

- Makes decisions on the best course of action by planning, organising, prioritising and balancing resources to achieve that action.
- Actively seeks information regarding a specific problem and evaluates the best course of action to make appropriate decisions.
- Specifies objectives, proposes alternatives, and indicates the best course action whilst anticipating possible risks and long term implications.
- Simplifies complex information from multiple sources to resolve issues.
- Seeks guidance as needed when the situation is unclear.
- Assesses external and internal environments in order to make a wellinformed decision.

CHAPTER 6. S-cube Training Needs Analysis

This chapter presents the results of the training need analysis conducted within the S-cube project and reports aggregated data collected in the three countries in which the project is currently active, that is UK, Ireland, and Germany. For this reason the author acknowledges the work of others project's participants in the collection of data from Ireland and Germany.

6.1 Training Needs Analysis Methodology

To inform the design and development of training programme involving SEs actors, a training needs analysis (TNA) has been completed across three partner areas: the UK, Ireland and Germany. The TNA phase aims to review, analyse and evaluate the training and development requirements of individuals working in Social Enterprises in relation to soft skills. The TNA process is essential to provide the information required to focus and direct the training effort to the areas of greatest need. In order to achieve this aim the process has gone through the following three steps:

- Determine potential soft skill gaps within national and European education and training systems for those working within Social Enterprises;
- In collaboration with the targeted Social Enterprises, identify the main soft skills to be enhanced, and provide a rational of how addressing those issues will be beneficial to the overall organisation performance;
- 3) Identify the types of individual within Social Enterprises who would benefit from a soft skills training process; that is, the type of target recipients, why the training is needed, and how trainees would utilise this learning.

A close collaboration with Social Enterprise organisations has been crucial since, it is well recognised that the direct involvement of group targets in the definition of training needs will favour the transfer of the new acquired skills to their everyday life, both personal and professional.

Multiple methods have been employed to collect the information required to address the identified learning needs. These comprise of:

- Semi-structured interviews with the relevant Social Enterprise actors Social Enterprises representative (educators, employees, trainers, etc.);
- Completion of questionnaires by Social Enterprise stakeholders, such as policy makers, agencies, professional bodies, business associations, supports organisations.

6.2 **Results of the Scoping Interviews**

Twenty-two one-to-one semi-structured interviews were conducted across the three partner areas: UK, Ireland and Germany. The interview schedule was designed to investigate training needs and prevalence of soft skills in SEs. The interview structure consisted of closed questionnaire type questions and open questions. Coding (Silverman, 2011) which is an interpretive method of qualitative research that organizes the data and exposes it to analysis, was used on the interview text transcribed for open questions. This interview text was parsed and coded against emerging themes, and these codes were linked backed to original document to provide full provenance on interpretation. These codes were then summarised in a meta matrix format (Miles and Huberman, 1994). This allowed a comparison to be made across themes and as well as to identify key factors within social enterprises. Closed questions were coded along a ranked interval scale with values ranging from 1 to 10. These techniques allowed analysis to transition to a more quantitative approach so more objective finding could be gleaned.

A general competency dictionary was shared and agreed with SEs interviewees during the interview phase, so to establish a common meaning and a mutual understanding of the various definitions of the relevant soft skills. Results of scoping interviews have also informed the design of the S-cube Competency Model (CM), already described in chapter 5.

By examining the gap between prevalence and importance (mean prevalence minus mean importance), we can estimate the degree to which a soft skill is under-represented relative to its importance. A higher positive gap between the two mean figures indicates two trends: firstly, that the prevalence is less than the importance attributed to the soft skill; secondly, the bigger gap, the greater the disparity between lower prevalence when compared to recorded importance.

6.2.1 Ireland

The scoping results from the CIT interviews with Irish SE stakeholders reveal that soft skills are highly valued by social enterprises. On being asked to rate a group of 17 different soft skills as to how important or useful they are to social enterprises, the rating on 13 of the 17 soft skills by the interviewees, delivered a mean score less than three on 13 of the 17 soft skills provided. (The scale varied from 1=most important/useful to 10=least important/useful). Of these 17, those rated as being most important were in order of importance (1=most important):

- 1. Communication
- 2. Effective leadership
- 3. Consultation
- 4. Strategic thinking
- 5. Understanding relationships
- 6. Creative problem solving
- 7. Conflict resolution

The rating of communication as the pre-eminent soft-skill is evident from the CEO of a social enterprise in Cork City:

"Communications would be very high in every walk of life in this enterprise; from management to supervisors to participants, so to me it would be number 1".

Despite the communication soft skill emerging as statistically the most important, some interviewees assigned their number one choice to effective leadership. It was felt that this skill was particularly important to social enterprises, given that resources are very limited and leaders need to be motivated by a vision for their enterprise, which in turn promotes effective leadership. This was highlighted by one senior manager whose company's remit is to support social entrepreneurs:

"So, effective leadership is very important. I would put that at number 1. The people we deal with have to be able to convince people to work for them, to motivate them and very often they are working with very limited resources. Being able to lead people with a vision; that's mostly just your own, at least initially. The rewards may not be what are available elsewhere, so it is really important".

Significantly, despite the importance attributed to soft skills, the prevalence of soft skills somewhat lagged behind the belief in their importance and usefulness: for example, effective leadership which was the second highest rated soft skill in terms of usefulness, was in the bottom third of soft skills in terms of its prevalence (also based on mean scores) within SEs as perceived by the interviewees. In fact, with the exception of one soft skill, ability to convince, 16 of the 17 soft skills examined recorded mean prevalence levels less than their rated importance, in most cases significantly so. There is a clear message from the CIT interviewees: soft skills are highly valued within social enterprises but are significantly lacking. This comes as no surprise to a third level academic interviewee specialising in social enterprises, based in Cork:

"Social enterprises I would say, and we've just done an audit, the data coming back to us is that they are not doing all that well in any of these areas. Very little effective leadership... Communication is very poor ...".

This same disjunction between highly valued soft skills on the one hand and their low prevalence in many cases is noted below for the Plymouth interviewees.

6.2.2 United Kingdom

In examining the Plymouth results, we find that the importance of soft skills also comes to the fore amongst social enterprise interviewees, delivering indications close to the from CIT cluster, described above. The interviewees
within this cluster reveal a rate of importance between mean scores of one and three (1=most important) on 12 of the 17 soft skills on which they were questioned. Of these 17, those rated as being most important were in order of importance (1=most important):

- 1. Communication
- 2. Effective leadership
- 3. Decision making
- 4. Flexibility
- 5. Active listening
- 6. Judgement
- 7. Personal effectiveness

It is interesting to note that the same top two soft skills were chosen by the CIT and Plymouth interviewees, and in the exact same order. These were Communication and Effective leadership.

There are parallels with the CIT interviews also: a specialist social enterprise academic in Plymouth echoes the comments by the social enterprise senior manager (opposite) in Cork, who placed a pivotal value on the almost charismatic importance of the vision of the leader of the enterprise in promoting effective leadership:

"It's important because it's about delegation, getting the right message across. The leader can embody the social enterprise in a lot of cases".

This same context may also be gleaned from an example given by a manager of an IT SE of how effective leadership can be exemplified in practice:

"In the need to articulate vision/passion with the product and social impact"

A key point which emerged from the UK interviewees is the interrelationship between most of the soft skills. This was also a feature of the interview findings in Germany and Cork. While speaking on a wide range of soft skills, the symbiotic linkage and importance between all of them was very often highlighted. This is epitomised by the comments of one social enterprise manager in Plymouth: "We do lots of client work, one-to-one coaching, mentoring so communications generally is important. Linked to this are active listening and questioning. You need a clear idea of the risks to the business and judging those is important. Things like resilience, flexibility, conflict resolution, influencing, convincing are all important. Culturally, leadership is interesting".

On the issue of prevalence of soft skills, the Plymouth cluster results closely mirrors the CIT results also, given that all 17 soft skills were significantly less prevalent (in their mean scores) within the social enterprises than their importance/usefulness rating. Again, as in the case of Cork, this finding also featured in the Plymouth interviews with one academic specialising in this area giving his assessment of the overall competence on soft skills within social enterprises as representing: "*Possibly low levels of skills in the sector*".

In another interview, one social enterprise manager suggested that competence in these soft skills was not consistently prevalent:

"Ability is hugely variable. In small/start up social enterprises everyone does everything so need to cover lots of areas".

The importance of social skills as a way of bridging economic, social and sometimes environmental (triple bottom line) needs within social enterprises is clearly evident in some of the Plymouth interviews in addition to those in Ireland and Germany. The comment from a Plymouth academic in the SE area is particularly illuminating in this regard, where fulfilling all these goals means:

"Getting the job done when there are also social intentions also interesting linking idealism with realism..."

6.2.3 Germany

The German cluster also exhibited strong support for the importance/usefulness of soft skills, with 10 of the 17 soft skills displaying mean scores less than three. Taking the mean scores, the seven most important/useful soft skills are:

1. Being able to convince

- 2. Communication
- 3. Consultation
- 4. Understanding relationships
- 5. Creative problem solving
- 6. Team building
- 7. Ability to influence

Once again the communication skill ranks in the top two for GeProS, as it has done in Plymouth and CIT, while consultation and creative problem solving are ranked high in both the GeProS and CIT clusters. The importance of how communication plays out in practical examples is evident from the comments of one SE co-ordinator:

"We do newsletters and networking. And the meetings with all participants. Furthermore I have to be able to convince and communicate in a short and concise way what the network stands for".

The linkage between different soft skills in an almost seamless way, as seen particularly in the case of the Plymouth interviewees, is evident also in some of the German interviews. Communication and active listening (amongst others) are dealt with together and seen as being learned together, as one SE manager remarked:

"I am sure that active listening and communication is an excellent tool for solving problems, and should be trained continuously".

Despite communication being ranked as second most important, it records a lower prevalence level which is only mid-range of the 17 soft skills examined. This statistical finding from the interview mean scores is also replicated in many of the interviewee comments, with overall competence of soft skills being rated as follows:

"Communication-quite good. Creative problem solving – good. Strategic thinking – needs improvement" (SE Manager).

"Communication – could be better. Self-awareness – good" (SE Coordinator).

"Difficult to judge" (SE Manager).

"Communication – good, personal effectiveness – could be better, being able to convince – very good, resilience – could be better" (SE Manager).

6.2.4 Overall Results of Scoping Interviews across All Partners

The overall results as expected, mirror the results for the three project partner areas as examined in the main. The results established in two of the clusters (CIT and Plymouth) indicate that communication and effective leadership ranked highest in terms of importance/usefulness. These two soft skills also display the highest gap with prevalence; meaning that these soft skills are very significantly under-represented as existing within SEs, despite their expression of overwhelming importance. Exactly the same can be said for four other soft skills, indicated by similar relatively large gaps also which are: decision making, strategic thinking, conflict resolution and judgement.

The scoping interviews indicate that the aforementioned six soft skills are amongst the most highly sought after overall, also across the 22 persons interviewed with a stake hold in SEs, i.e. social entrepreneurs, trainers, etc. In overall terms, in addition to the disparity between mean prevalence and mean importance being the highest for these soft skills, the overall figures also demonstrate that these six soft skills display mean scores putting them as the most useful soft skills, in exactly the same order.

In terms of bringing forward the high identification of need for soft skills into a training environment, it is clear across all interviews that 'face to face' interaction in facilitating soft-skills learning is extremely important. However, the consensus is that new IT systems can be harnessed to fulfil this objective also. In this sense, modern IT infrastructure is not antithetical to the continuing need to promote face to face learning. Indeed, IT can support face to face learning. The marriage between soft skills and IT can also create a newly empowering learning environment which is consistent with empowerment of individuals in keeping with self-help principles of SEs. This is clear from the following sub-sample of interview findings:

"A lot of content is best delivered face-to-face in small peer groups. It's about trust, feel personal connection. There are cost/time issues so can see we need to break the mould – online system could do this. Digital platform could be great" (Plymouth IT SE Manager).

"I am a big fan of the blended method, like online and classical (workshops, e-learning and tutorials) - that's the right thing for me. In the online part, I definitely like to see theory, knowledge-based and certain role-plays" (SE Manager, Germany).

"Webinars would be great. A series of webinars would be really interesting, I think. What would be very useful is where a webinar can bring a lot of people of similar interests and backgrounds together and then you can also have offshoots where there is a 'chat function' and people themselves can take it from there and share experience and learning. So, you are not alone learning from the teacher or expert, but also from your peers and you are also building that network effect within it." (Manager and SE trainer, Ireland).

6.3 **Results of the Online Survey**

In addition to the scoping interviews, an online survey was conducted across the partner region to trawl further views on the training needs of SEs in the area of soft skills. SEs were primarily targeted while also recorded were the views of the broader stakeholders in the area. Outlined in this section are statistics and trends that emerged.

As the literature indicates, SEs are diverse and represent a wide variety of business activity. Consequently, a stratified sample was taken within each of the partner areas which broadly represented each stratum within the overall cross section of the population of SEs. The sample population was constructed from a variety of databases in the partner areas representing this stratum and the overall population emerged from these populations. A questionnaire consisting of over 29 questions (including sub-question areas) was developed, incorporating the aims and objectives of the training needs analysis. The survey covered three sections; demographics, soft skills and education and training delivery. The questionnaire was coded and put online. The survey was initially piloted with a small number of participants. It was evaluated, further improved and the link disseminated to each of the samples previously

identified within each partner area. Overall 134 individuals attempted the survey with 103 people completing all 29 questions giving a response rate of 76.9%. The UK had the highest response rate with 42%, followed by Germany with 38% and Ireland with 19%. These response rates are broadly consistent with distribution of SEs across these regions.

As can be seen from Figure 6.1 below, the largest cohort of respondents represents board members and senior management within SEs. Together this group corresponds to 55.5%% of input to the survey. Respondents who describe themselves as volunteers and paid workers represent 30.8%; managers and supervisors together represent 13.7%. Of those who have recorded their views, 87.3% of those are directly involved with a SE. The remaining survey participants describe themselves as other stakeholders, e.g. trainers, advocates, service users etc.



Occupational position within your organisation: (please tick one box)

Figure 6.1 Occupational positions within organisations

The ratio of urban to rural respondents has been recorded as approximately 3:1, in favour of urban SEs. (Figure 6.2). The actual percentages are 74.8% urban SEs and 25.2% rural SEs. Results also illustrate there are high diversity levels in the areas of business with no strong indicator in one direction. Indications are that respondents have come from diverse areas of business;

largest cohorts of respondents operated in areas of service industries, healthcare and education.



Geographically, how do you describe your social enterprise? (please tick)

Figure 6.2 Rural and Urban distribution

As is illustrated by Figure 6.3, a large proportion (70.3%) of respondents are associated with SEs that employ less than 30 people, staying with the trend that SEs tend to be small to medium sized businesses. Although a sizable cohort (15.3%) also reported that their SEs employed more than 70 people.





Figure 6.3 Numbers of employed in SEs respondents

6.3.1 Communication Skills

In all four areas of communication skills, (communication, consultation, ability to influence, and ability to convince) the findings indicate that the level of importance assigned to this cluster all exceed the perceived levels by respondents of their actual existence in SEs (see Figures 6.4 & 6.5). Across all four areas of communication skills an average of 43.25% of respondents assigned a level 1(highest) importance status to these skill sets, whereas only an average of 20% assigned the same level of existence to those same skills in SEs. This indicates that although the highest importance ranking of 43.25% has been assigned to communication skills, respondents are indicating that they do not in fact exist, relevant to the extent of their assigned importance. Taking Figure 6.4 in conjunction with Figure 6.5 (below), we can see that 67.5% of those surveyed gave highest importance status to communication skills, (1 of 4 in the overall set) but only 30.4% indicated that they felt that communications skills actually it existed at that level; i.e. less than half.



Taking the soft skills listed below (Communication Skills) and on a scale of 1-5, how would you rate them as being important to your social enterprise or a social enterprise(s) with which you are familiar. (Please tick one box on each line. 1 being most important and 5 being of least importance.)Communication Skills

Figure 6.4 Importance rating for Communication Skills

Taking the group of soft skills listed below (Communication skills) and on a scale of 1-5, how would you rate them as actually existing within your social enterprise or a social enterprise(s) with which you are familiar. (Please tick one box on each line. 1 indicates a high presence and 5 being lesser so)Communication Skills



Figure 6.5 Perceived levels of existence for Communication Skills in SEs

When asked how important the communications skills cluster (Figure 6.6) is to respondents' personal and professional development, an average of 45.5% of those surveyed assigned the highest level (1) to the to the four soft skills; communication, consultation, ability to influence and ability to convince. 55.9% singled out communication (a sub-set of the overall cluster) as being of highest importance, followed by being able to convince at 48% at the second level.



Figure 6.6 Importance in enhancing personal & professional development for Communication Skills

6.3.2 Top Quality Management Soft Skills

From Figure 6.7 it is possible to calculate that 47.6% of those surveyed assigned level 1 importance on average across the six soft skills which comprise the top quality management cluster: effective leadership, conflict resolution, creative problem solving, team building, strategic management and decision making. Comparing the figure of 47.6% (highest level of importance) to the perceived existence (Figure 6.8) of these same skills within SEs, (24.2%) it becomes apparent that a large gap emerges indicating that these soft skills are significantly under-represented as existing within SEs notwithstanding their expression of high importance in Figure 6.7 Taking individual soft skills within this cluster, it becomes apparent that this gap is even larger in some instances. 53.9% (Figure 6.7) of respondents cite effective leadership as being most important. However, only 28.3% (Figure 6.8) of respondents see that soft skill as actually existing within their SE.



Figure 6.7 Importance rating for Total Quality Management



Taking the soft skills listed below (Total Quality Management) and on a scale of 1.5, how would you rate them as actually existing within your social enterprise or a social enterprise(s) with which you are familiar. (Please tick one box on each line. 1 indicates a high presence and 5 being lesser so.)Total Quality Management (how to lead and manage people and yourself effectively)

Figure 6.8 Perceived levels of existence for Total Quality Management in SEs

On average, just over 48% of respondents assigned a level 1 ranking of importance, in regard to the four soft skills which comprise the top quality management cluster of soft skills. 58.4% of respondents assigned a level 1 importance ranking to the individual soft skill of effective leadership, followed

by 54.5% to Strategic thinking within the total quality management cluster (Figure 6.9). The soft skill of effective leadership has a highest importance ranking of 58.4% while strategic thinking follows at a second level ranking of 54.5%.



Figure 6.9 Skills Cluster and Personal & Professional development for Total Quality Management

6.3.3 Inter/Intra Personal Skills

In the inter/intra personal skills cluster as represented in Figure 6.10 below, an average of 36.4% of those surveyed assigned level 1 importance across the seven soft skills in this particular cluster (resilience, active listening, flexibility, self-awareness, personal effectiveness, understanding relationships and judgment). In terms of how respondents see these soft skills in existence within SEs (Figure 6.11) it emerges that only 24.3% of respondents assigned a level 1 indication. Once again it may be deducted that a large gap emerges between assigned importance and assigned levels of perception of existence of these soft skills within SEs. On examination of where the largest gap emerges between assigned importance and assigned prevalence, the soft skill of personal effectiveness is representative of the highest gap. The difference of assigned highest rankings of importance and prevalence in this instance is 40.6% and 22.3% respectively, showing a gap of 18.3%.



Taking the soft skills listed below (Inter/intra-personal skills) and on a scale of 1-5, how would you rate them as being important to further enhance your personal and/or professional development. (Please tick one box on each line. 1 being most important and 5 being of least importance)Inter/Intra Personal Skills

Figure 6.10 Importance rating for Inter-Intra Personal Skills



Taking the soft skills listed below (Inter/intra-personal skills) and on a scale of 1-5, how would you rate them as actually existing within your social enterprise or social enterprises with which you are familiar. (Please tick one box on each line. 1 indicates a high presence and 5 being low presence.)Inter/Intra Personal Skills

Figure 6.11 Perceived levels of existence in SEs for Inter/Intra Personal Skills

When asked if respondents felt that the inter/intra personal skills cluster was important for their personal/professional development (Figure 6.12), a total of

36.4% assigned a level 1 ranking. Within this cluster the individual soft skill of active listening was assigned the highest ranking of 42.6%. This was followed by personal effectiveness at 40.6% at the same level ranking. By combining both 1 and 2 level rankings to these two soft skills, an average of 38.6% of respondents report these score highest in importance.



Figure 6.12 Importance in enhancing personal/professional development for Inter/Intra Personal Cluster

6.3.4 Training and education delivery and methodology

The views of interviewees were sought on how and what they considered as appropriate modes and approaches to the delivery of training and education in the area of soft skills. As can be seen from Figure 6.13, a high proportion of respondents either agreed or strongly agreed (78.6%) that training in the area of soft skills is required. This figure is in keeping with the disparity that emerged from previous figures captured in the survey which showed that while high levels of importance are assigned to the need for soft skills, perception of their actual existence in respondents' SEs is quite low. Further questions were also posed in relation to approaches to training.



"To help the development of soft skills, training is required". (Please tick one box)

Figure 6.13 Training and the Development of Soft Skills

As can be seen from (Figure 6.14) a high proportion of respondents were in agreement that role-play is a useful way to develop soft skill training with 72% either agreeing or strongly agreeing with its proposed usage.



"Using role play is a useful way to develop soft skills in training". (Please tick one box)

Figure 6.14 Role play and Soft Skills Training

As Figure 6.15 indicates, 33% of respondents agreed that computer games aid the development of soft skills. However, over one in four respondents (28.1%) disagreed or strongly disagreed with this statement. This may be attributed to computer games being relatively new in a training context for many people and raises a further question as to how this correlates with age and/or a digital divide. 33% of respondents did not agree or disagree. This may indicate that respondents did not have experience of using computer games as a training tool and maybe not see that they can make an informed opinion.



Figure 6.15 Computer online role-play and soft skills

6.3.5 Role-play being developed through computer games for participation of staff

36.9% (Figure 6.16) of those surveyed agreed or strongly agreed that roleplay can be usefully utilised through the development of computer games in which staff can participate. Similar to the previous question, a significant percentage (30.1%) did not respond to this question, which once again raises further questions as to why people do not have an opinion in this area. Additionally, 26.2% of respondents either strongly disagreed or disagreed that computer games incorporating role-play can be usefully developed for staff.



Figure 6.16 Computer online role-play for staff of SEs

When given a choice of how training would be delivered, most respondents (76.5%) preferred a combination of all three options; e-learning, workshops and tutorials (Figure 6.17). The most favoured individual option was workshops, returning a score of 92.1% of those surveyed. The least individual favoured mode of delivery was e-learning at 47.1%. It may also be noted here that 24.62% respondents did not reply to this question. Once again, this may indicate that new technologies in teaching not be as well-known as others.



Figure 6.17 Preference of training delivery methods

6.3.6 General remarks

The growth of SEs across the EU, the recognition and growing demand for soft skills in areas of business, and the attendant development of public policy at both national and EU levels, all indicate that the work of the S-cube project has the potential to significantly contribute to the third sector in the area of sustainability. The work also has an added value in that it has the potential to reach those who may not necessarily have the more usual mainstream training that is required at management level, in that many SEs by their very nature, have volunteers who provide very valuable contributions but who may lack management experience or expertise. Given that SEs have the added burden of arriving at a double or treble bottom line, the challenges they face can also be significantly higher.

The results of the online survey conducted to elucidate views on training needs from over 100 SE stakeholders has highlighted that soft skills relating to the following areas were rated as being 'important' or 'very important' by a large proportion of respondents from social enterprises: communication (83.7%), consultation (66.7%), ability to influence (68.1%), and ability to convince (65.8%). However, existing skills in these areas were rated to be low. Moreover a high proportion of respondents were in agreement that role-play is

a useful way to develop soft skill training with 72% either agreeing or strongly agreeing with its proposed usage and 36.9% of those surveyed agreed or strongly agreed that role-play can be usefully utilised through the development of computer games in which staff can participate. Therefore, computer based role-playing training scenarios need to be developed to provide an opportunity for participants to develop key communication skills in a social enterprise context.

Online gaming incorporating role-play as a new technology in teaching and learning dove tails with an increasing market popularity and demand in this area. This popularity and demand is now being harnessed through the S-cube programme of learning in a very positive sense to contribute to new, innovative, empowering teaching and learning methodologies and approaches that have the potential to open up wider horizons for SEs and the broader learning community.

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Appendix 1. Online role-play questionnaire

The following survey aims to gather information regarding your experience as educator, trainer, psychologist, pedagogist with the use of educational online role-play based on e-learning digital platforms applied in various contexts and purposes. Please note that you will find different types of questions: a) for some questions you will be asked to rate your agreement with respect to some statements on a five point scale, from "Strongly disagree" to "Strongly agree"; b) some of the questions will be followed by options to choose from; c) for other questions you will be asked to write your own answer in the blank space provided.

Name

Gender

O Male

O Female

Professional role

Please indicate if you ever had any previous experience with role-play activities

O Yes

O No

Please specify the delivery method adopted with the technology used

- **O** Blended (face to face meeting and online sessions)
- Remote Online sessions only

Please specify the total number of training/learning sessions you were involved in

Please specify the length of training/learning sessions (e.g. 45 mins; 1 hr; etc.)

Please specify average number of participants involved in the training/learning sessions

Please specify participant's age group (you can tick more than 1 box)

- **18-30**
- **30-40**
- **40-50**
- Over 50

Please specify the contexts in which the training/learning tool was used (e.g. University, Training institutions or agencies, ME and SME organisations, Public Administration, Non-governmental organizations, etc.)

Please indicate the Country in which the training technology was used

If you wish to receive updates on the survey, you may choose to enter your email or contact details below. Your contact information might only be used by the researchers in case of any additional information about your experience.

If you have any questions about the survey please contact: Elena Dell'Aquila, e-mail: elena.dellaquila@unina.it

1. I believe that the possibility of acting a role through avatars encourage participants' self-disclosure.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

2. I believe that the possibility of creating scripts and learning scenarios tailored on specific learners' needs boosts the engagement of participants in the training/learning process.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- **O** Agree
- O Strongly Agree

3. I believe that the possibility of creating scenarios, identify and assign roles to play, define emotional and physical features of avatars to be interpreted, helps to focus on specific training areas that might be further developed.

O Strongly Disagree

O Disagree

- **O** Neither Agree nor Disagree
- O Agree
- O Strongly Agree

4. I believe that the possibility to adapt scripts and revise roles to play while the simulation is in progress it is import in order to focus on relevant emergent dynamics.

- Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- O Strongly Agree

5. I believe that the possibility to intervene during the simulation suggesting possible ways to perform the role to play can enhance flexibility and self-discovery.

- Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

6. I believe that the possibility to use verbal messages in combination with para-verbal and non-verbal signals helps to make exchanges and interactions emotionally engaging.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

7. I believe that the possibility to use verbal and para-verbal and nonverbal communications can boosts the practice and experience of different styles of communication.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

8. I believe that feedback and debriefing are crucial aspects for creating opportunities and experiences of valuable learning.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

9. I believe that the possibility of giving constructive feedback at any time during the simulation facilitates reflections upon emerging feelings, dynamics, and behaviours.

O Strongly Disagree

- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- O Strongly Agree

10. I believe that the possibility to intervene while the simulation is in progress (e.g. by taking participants' role) facilitate people to experience new point of views and support decision-making.

- O Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

11. I believe that the possibility to document and analyse story dynamics occurred after the simulation is concluded can help in drawing evidence of participants' development and progress.

- O Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

12. I believe that online role-play simulation make learning more meaningful to participants than face to face role-play activities.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- **O** Agree
- **O** Strongly Agree

13. I believe that a blended methodology with the combination online role pay activities and face to face meeting is suitable for skills and competencies training and/or development.

- O Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

14. I believe that during the online role-play simulations participants can experience reactions, emotions, and feelings both authentic and realistic.

- O Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

15. I believe that online role-play learning experiences boost relationships with participants as per face to face role-play activities.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- O Strongly Agree

16. I believe that online role-play learning experiences engage participants cognitively, affectively and emotionally.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

17. I believe online role-play games as being effective for helping participants to master the desirable skills as envisaged by training outcomes.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

18. I believe that both online and face-to-face role-play are valuable methods as they can help to achieve similar pedagogical and/or learning goals.

- O Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

19. I believe that the use of online role-play enable trainers to apply typical principles and techniques of face to face role-play (e.g. meta-role "as if"; role-reversal; double; mirroring, auxiliary ego).

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

20. I believe that there are key differences between online and face to face role-play activities, such as: (please select items, you can tick ALL options that apply to you)

a) Decrease of role and emotional engagement in online role-play

b) Increase of role and emotional engagement in online role-play

- **c**) Decrease of effectiveness of communication in online role-play
- d) Increase amount of exchange and interactions between participants in online role-play
- e) Focus on cognitive aspects and less on relational dimensions in online role-play
- □ f) Focus more on individual than team objectives in online role-play
- **g**) Learning is perceived less meaningful in online role-play
- h) Other please state your personal experience/view and briefly expand on some key differences you consider relevant:

21. I think that the use online role-play highlights additional strengths and advantages of role –play methodology that might not be occurring face-to-face: (please select items, you can tick ALL options that apply to you)

- □ a) Anonymity encourages self-disclosure
- b) Playing through avatars enhances participants' comfort, engagement and involvement
- c) Acting through avatars allows affective detachment and help to master emotions and elaborate dynamics
- d) A twofold identification process seems to occur, as the physical appearance of the avatars users act through reinforce the identification with emotional features to play out
- e) Learning is perceived more meaningful as it based on direct experience, of practically doing something
- f) Other please state your personal experience/view and briefly expand on some key differences you consider relevant:

22. I believe that the use of online role-play games has not the same effectiveness than face to face role-play activities.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

23. I believe that the use of online role-play games has not the same effectiveness than face to face role-play activities because of : (Please select items, you can tick ALL options that apply to you)

- □ a) Lack of role and emotional engagement
- □ b) Lack of effective communication between participants
- **C**) Lack of effective xchange and interactions between participants
- **d**) Difficulty to manage the interactions between participants
- e) Learning is perceived more meaningful in face-to-face role-play
- □ f) Difficulty to keep people's focus and attention on learning
- g) Other please state your personal experience/view and briefly expand on some key differences you consider relevant:

24. Please specify if any weak points of using online role-play as medium for training can be related to the following points: (please select items, you can tick ALL options that apply to you)

- a) Lack of experience of professionals and or participants with computer based game
- □ b) Lack of preparation to the use of the tools
- c) Suspicion and distrust of the use of the MORPG by people/ environments/working contexts where they have been applied
- d) Difficulty to transfer role-play methodology and its principles to computers' environments
- e) Other please state your personal experience/view and briefly expand on some key differences you consider relevant:

25. Please specify what you think would make online role-play more effective and valuable: (please select items, you can tick ALL options that apply to you)

- a) Raise awareness of the use of MORPG/technology in supporting learning processes
- b) Additional and or customised sessions dedicate to support professionals on the use of the methodology
- c) Additional sessions for facilitating users to familiarise with the virtual tools
- d) Increase number of face to face sessions during the training programme/learning process
- e) Increase the number of Online Role Play sessions during the training programme/learning process
- f) Increase the length of Online Role Play sessions during the training programme/learning process
- g) Other please state your personal experience/view and breifly expand on some key differences you consider relevant:

26. I would recommend the use of role-play educational simulation into training practice and or for learning purposes.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

27. I believe that is difficult to implement online role-play into training practice and or for learning purposes.

- **O** Strongly Disagree
- **O** Disagree
- **O** Neither Agree nor Disagree
- O Agree
- **O** Strongly Agree

28. Please briefly state main difficulties encountered in implementing online role-play methodology.

29. We would be grateful if you could briefly report any aspect regarding the online role-play you have managed, its implementation and methodology that might be valuable for clarify role of new technologies in your specific context of application.

Appendix 2. Social Enterprise Policy

European Policy Context

As introduced earlier in chapter 5, recently Social Enterprises have become increasingly noteworthy within the EU public policy. The key reasons for this will be outlined below. The growth of Social Enterprises in recent years has given way to new developments around funding, management, ethos, identity and other critical factors. One of the earliest writers to identify the potential and the unique characteristic of Social Enterprises was David Billis (1993) of the London School of Economics. In Organising Public and Voluntary Agencies, Billis defines a Social Enterprise as a hybrid agency which actively interacted with ordinary citizens in the third sector; government officials in the public sector; and with business people in the private sector. Billis suggested that these "entrepreneurial agencies" (Social Enterprises) within the third sector had the best chance of long-term sustainability. By "entrepreneurial", he meant that the Social Enterprise could get funded by: "Firstly the government, in terms of grants; secondly private sector with business activities and or gathering donation and sponsorship; and thirdly civil society itself, by way of raising money through donations, membership fees or charges for offering specific services or goods" (Billis, 1993).

The importance of Social Enterprises and their potential to develop millions of jobs across the European Union, alongside meeting major social and environmental objectives (the "triple bottom line"), received a major impetus with the publication of the "Delors EU Commission White Paper on Growth, Competitiveness and Employment" (1993). This paper recognised the growing importance of the third sector in creating jobs and contributing to economic prosperity. In particular, it identified significant job opportunities in the social economy, with a strong emphasis on service sector employment potential.

The growth of Social Enterprises were initially identified in 1993 with significant EU white paper development in the area (EU Commission, 1993) and since then under the EU's flagship initiative "The Innovation Union, the

European Platform against Poverty and Social Exclusion" (EU Commission 2010) and the "Single Market Act" (EU Commission, 2011a). These developments have been more contemporarily and significantly endorsed by the introduction of the European Commission's recent "Social Business Initiative", launched in October 2011 (EU 2011b). In launching this initiative, the President of the Commission, José Manuel Barroso (2011) enthusiastically spoke about how SEs can contribute to reducing many social problems across Europe, including poverty and unemployment. He further pointed out that "...Action at EU level can be an accelerator for social business, by raising awareness of this sector and its huge potential. Social businesses are a growing and dynamic part of the European social economy which represents millions of employees".

Following will be introduced and synthesize the major evolutions experienced by Social Enterprises across the EU countries involved in the Scube project and key challenges they are facing: Italy, Germany, Ireland and United Kingdom.

Italy

The concept of Social Enterprise first appeared in Italy in the late 1980s (a few years before it emerged in the United States). The term was promoted by a journal launched in 1990 entitled Impresa Sociale, with the aim to introduce the pioneering initiatives of the Italian Parliament creating the legal form of the "Social Cooperative".

Since the approval of Italian Parliament in 1991 (law 381/1991) which introduced the social cooperative legal form, social cooperatives have represented the main type of Social Enterprise in Italy so far.

The law recognise two types of Social Enterprises: type-A with providing social and personal Services, type-B with a focus on work integration for disadvantaged people. In 2005, there were more than 7,300 social co-operatives in Italy, employing 244,000 workers. Consequently to an impressive development of other types of Italian third sector organizations with social

entrepreneurial activities, a broader law on Social Enterprise (Impresa Sociale) was introduced and adopted in 2005 with the Law 118/2005.

Under the Italian policy framework a Social Enterprise is a private entity that provides social utility goods and services, acting for the common interest and not for profit. A Social Enterprise is neither a new legal form, nor a new type of organization, but a legal category in which all eligible organizations may be included, regardless of their internal organizational structures. Therefore, the eligible organizations could in theory be cooperatives (i.e. employee, producer, or customer-owned firms), investor-owned firms (i.e. business corporations), or traditional non-profit organizations (i.e. associations and foundations). This is the so-called principle of "neutrality of the legal forms" adopted by the Italian law. Interestingly, the definition of Social Enterprise within the 2005 legislation is similar to that of EMES as cited previously in chapter 5.

Not all countries can count on a legal framework favourable to Social Enterprises as in Italy. For example, in Ireland and United Kingdom the public procurement legislation does not allow for preferred treatment for Social Enterprises.

United Kingdom

The definition of Social Enterprise given by the UK Government has been introduced before in chapter 5. In the British context, Social Enterprises include a variety of organisations: community enterprises, credit unions, cooperatives, charities, social firms, employee-owned businesses, housing associations, development and leisure trusts. The concept of Social Enterprise is not a legal structure itself. It is a general term given to a range of business models. The core unifying features of Social Enterprises are social purpose and trading.

There are bewildering arrays of organisational structures that can achieve this available to Social Enterprises: charitable company or association, company limited by shares or guarantee. It is interesting that the UK has developed a new legal form called the community interest company (CIC) which is a new type of limited company designed specifically for those wishing to operate for the benefit of the community rather than for the benefit of the owners of the company.

Both in Italy and in UK, Social Enterprises are embedded in the third sector. They are defined by their social purpose and the limitation on the distribution of profit that they impose upon themselves. In both countries too, Social Enterprises are active in a wide spectrum of activities, such as: welfare; health; education, and professional training; environmental and eco-system protection; development and cultural heritage; social tourism; research activities and delivery of cultural services, and so on. However, these two UK and Italian models differ in some aspects. The Italian laws stress a specific governance model, through a requirement to involve various stakeholders; the British model stresses the business character of Social Enterprise. Although no reference is made to a specific percentage of income to reinvest in the market, is widely accepted that a significant part generally equal to 50% of the total income must be re-marketed for the enterprise to be defined as Social Enterprise.

Ireland

Social Enterprises along with charities and co-operatives are part of the Irish social economy. O'Hara (2001) developed 5 broad categories with the purpose of classifying Irish Social Enterprises.

These categories are listed, as follows: work integration Social Enterprises (providing integration of members of excluded groups into the labour force); credit unions; Social Enterprises providing personal and proximity services; local development organisations; housing co-operatives.

Although there is no specific legal form for Social Enterprises in Ireland, most Social Enterprises use the legal form of a company limited by guarantee. A small number of Social Enterprises uses industrial and provident societies and co-operatives legal forms (O'Shaughnessy 2008:24). More recently Social Enterprises can also apply for charitable status, which provides them with exemptions from certain taxes (Charities Act, 2009). In Ireland the emphasis is put on the role of Social Enterprises and the local social economy development. Therefore Social Enterprises in Ireland are more communitybased and then led by philanthropic goals. An example is represented by the Irish credit union movement, consisting of a group of people who collectively save money and lend to each other at an equitable and reasonable rate of interest.

Germany

In Germany Social Enterprises face a paradoxical situation. On the one hand, they almost do not exist on the political agenda, in the public policy or the media, and in the academic discourse. Interest around Social Enterprises is limited to a small circle of expert that receives almost no support from official institutions. On the other hand, a Social Enterprise culture and its importance is recognised. One of the main reasons probably lies in the fact that the German socio-economic model is based around the "social market economy" concept that aims to ensure a competitive economy, free initiative and social progress harmonized with social justice. From this point of view, there was no need for new approaches such as Social Enterprises. In addition the term Social Enterprise was confused and misinterpreted as synonymous of the socialist economy.

Moreover those organizations which could be qualified as Social Enterprises do not recognise themselves as belonging to a wider social economy sector. Therefore they result as separated in a variety of different "milieus", each with its own terms, identities and organisations. Often, they do not even communicate with each other. Besides the important role-played by Social Enterprises for contrasting unemployment, poverty and social exclusion, there are no real support schemes at the institutional level either regional or national. This trend has recently started to change with the first national congress in Berlin in 2006, on the "solidarity-based economy".

In spite of this difficult context and although not labelled as such, many Social Enterprises are working with economically and socially disadvantaged groups across many areas of social services environment, sports and culture, as well as in sectors including agriculture and high-tech production. Whereas the presence of many welfare schemes for the integration of unemployed and socially excluded people, these are not appropriate for the creation of sustainable Social Enterprises, due to the lack of specific legal structures, financial, as well as organisational supporting structures.